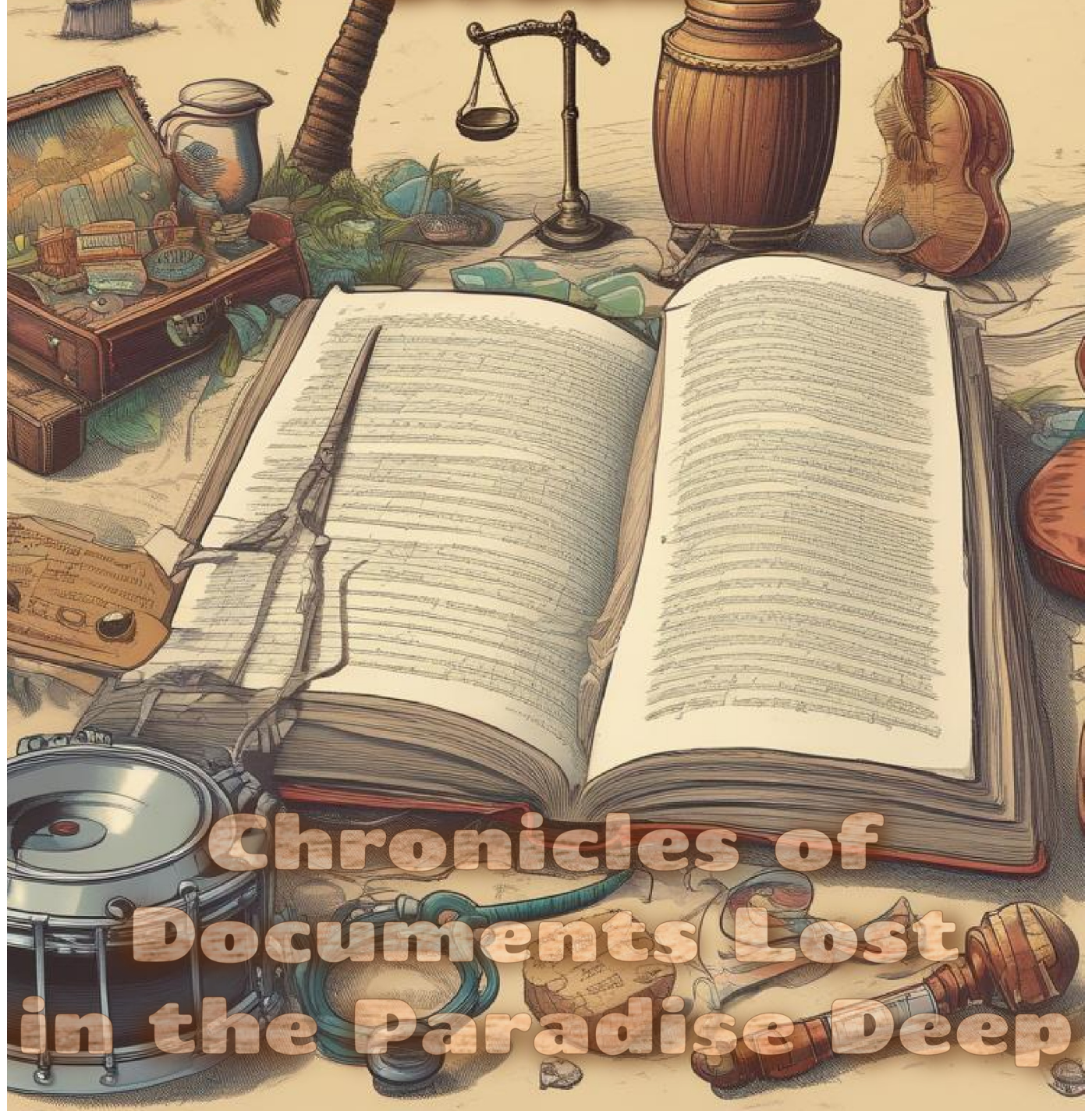


Cascade of Absence: The City of St. Pete Beach,



Chronicles of
Documents Lost
in the Paradise Deep

County Of Pinellas)

State of Florida)

PUBLIC NOTICE

On March 28, 2025,

Administrative Default At

Common Law verified on

The City Of St. Pete Beach ,

via USPS Certified Mail

7020 2450 0001 0277 5811

EXECUTIVE SUMMARY

This document set chronicles the City of St. Pete Beach's response—or lack thereof—to Public Records Request PRR2025-22, submitted on February 2, 2025, and received February 5, 2025, seeking evidence to substantiate six justifications for Ordinance 2025-05 as outlined in the City's January 28, 2025, agenda packet: health impacts, community feedback, declining property values, legal defensibility, enforcement necessity, and business impact compliance. The request demanded a tally of existent and non-existent records across six categories (DR1–DR6) spanning 2021–2025, emphasizing transparency under Florida Statutes § 119 and § 166.041(4)(a).

The City's response unfolded in two partial, reactive instances: March 11, 2025, following a Notice of Fault (NOF) after 41 days of silence, and March 28, 2025, hours after a public Facebook video highlighted an Administrative Default at Common Law (ADACL). The first response provided seven documents, partially addressing DR1 (health studies), DR2 (community feedback), and DR5 (enforcement records), while omitting DR3 (economic impacts), DR4 (legal memos), and DR6 (business impact estimates), with no completed tally sheet. The second response added eight documents, including a vague Business Impact Estimate (BIE) and generalized references, but still failed to fully address DR1–DR6 or provide “zeros” for non-existent records.

As of April 7, 2025, nearly two months post-submission, the City's incomplete responses—lacking city-wide health data, economic analyses, comprehensive legal opinions, and a robust BIE—undermine the ordinance's rational basis. The persistent absence of a tally sheet with exemptions or “zeros,” despite repeated requests, violates Florida's public records laws and supports an adverse inference (*Public Health Trust v. Valcin*, 507 So. 2d 596, Fla. 1987) that critical evidence does not exist or contradicts the City's claims. This opacity risks legal challenges, including mediation or judicial remedies under Chapters 119 and 166, and highlights a pattern of delayed, reactive compliance triggered by public pressure rather than statutory duty.

INTRODUCTION

On January 28, 2025, the City of St. Pete Beach published an agenda packet for the first reading of Ordinance 2025-05, proposing a “plainly audible at a distance” noise standard to address alleged city-wide issues of health, quality of life, property values, legal compliance, enforcement, and business impacts. Concerned by the ordinance’s broad scope and potential overreach—particularly given prior localized complaints (e.g., Red, White & Booze in 2023)—Geoffrey J. Caputo initiated PRR2025-22 on February 2, 2025, to test the evidentiary foundation of these claims. Submitted via certified mail and received February 5, 2025, the request targeted six document categories (DR1–DR6) from 2021–2025, accompanied by a tally sheet to clarify record existence, non-existence, or exemptions, and an affidavit denying the records’ existence unless proven.

The ensuing 41-day silence prompted a Notice of Fault on March 8, 2025, followed by a partial response on March 11, 2025, covering only three categories with limited, pre-2025 data. A Thank You Letter on March 13, 2025, flagged deficiencies and set deadlines, yet no full compliance emerged. On March 28, 2025, an ADACL formalized the City’s default, coinciding with a public video that spurred a second partial response that day. By April 7, 2025, despite 15 documents provided, critical gaps persisted—most notably in economic and legal substantiation—leaving Ordinance 2025-05’s justifications unproven.

This compilation documents the timeline, correspondence, and legal analyses of this process, exposing procedural non-compliance under Florida Statutes § 119.07 and § 166.041(4)(a), substantive weaknesses in the ordinance’s basis, and a reactive governance pattern. It serves as both an administrative record and a call for transparency, with potential next steps including mediation or litigation to enforce public records rights and challenge the ordinance’s validity.

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CITY COMMISSION MEETING CITY OF ST. PETE BEACH

Agenda Report

Action Request:

Consider adoption of additional clearly audible, nuisance based standard in the noise ordinance.

Strategic Objective:

To apply a common sense, objective and easy to apply additional third standard for noise violations.

Date:

January 28, 2025

Prepared By:

Becky Vose, City Attorney's Office

Summary of Issue:

The City currently has two standards for noise violations that have not been effective in controlling excessive noise in the City.

This ordinance provides a legally defensible and easy to apply additional third standard that is a nuisance-based clearly audible standard to curb excessive noise in the city.

Funding:

No additional funding should be necessary for this amendment.

Attachments:

Copy of proposed Ordinance.

Ordinance 2025-05

AN ORDINANCE OF THE CITY OF ST. PETE BEACH, FLORIDA CREATING ADDITIONAL NEW NUISANCE NOISE CONTROL PROVISIONS IN CODE CHAPTER 46 ENVIRONMENT, CREATING NEW ARTICLE VI NOISE PLAINLY AUDIBLE AT A DISTANCE IN A RESIDENTIAL LOCATION, CREATING SECTION 46-160 AUTHORITY AND SCOPE, CREATING SECTION 46-161 FINDINGS OF FACT, CREATING SECTION 46-162 EXCESSIVE NOISE DECLARED A VIOLATION AND THE MEANS AND METHOD OF DETERMINING EXCESSIVE NOISE AND DEFINITION OF RESIDENTIAL LOCATION, CREATING SECTION 46-163 DECLARATION OF PUBLIC NUISANCE AND DECLARATION OF IRREPARABLE AND IRREVERSIBLE NATURE OF NOISE VIOLATIONS, CREATING SECTION 46-164 ENFORCEMENT, CREATING SECTION 46-165 CONSTRUCTION OF ARTICLE, CREATING SECTION 46-166 EXCESSIVE NOISE DETERMINATION UNDER PLAINLY AUDIBLE AT A DISTANCE IN A RESIDENTIAL LOCATION, MEANS AND METHOD, CREATING SECTION 46-167 EXEMPTIONS, CREATING SECTION 46-168 SEVERABILITY; PROVIDING FOR CODIFICATION; CONFLICTS; SEVERABILITY; CORRECTION OF SCRIVENER'S ERROR; CONSTRUCTION; PUBLICATION; AND AN EFFECTIVE DATE.

WHEREAS, it is the public policy of the city that every person is entitled to noise levels that are not detrimental to the life, health, comfort and peace of the city's residents and visitors, and to be free of excessive noise that interferes with the enjoyment of property in the city by its residents and its visitors

WHEREAS, residents of the city have the right to have peace and quiet in and about their residences, and be free from excessive noise, particularly during times and days when many residents typically relax and sleep.

WHEREAS, it is recognized that excessive noise potentially lowers the value of nearby residences.

WHEREAS, the City Commission finds these amendments to assist in the preservation and maintenance the public health, safety, and welfare.

WHEREAS, a business impact estimate pursuant to Florida Statute 166.041(4) has been prepared.

NOW, THEREFORE, THE CITY COMMISSION OF THE CITY OF ST. PETE BEACH FLORIDA, HEREBY ORDAINS:

SECTION 1. Recitals. The above recitals (“Whereas” clauses) are hereby adopted as legislative findings, purpose and intent of the City Commission.

SECTION 2. The Code of the City of St Pete Beach is amended as shown in EXHIBIT A to this Ordinance.

SECTION 3. Codification. This Ordinance shall be codified in the Code of the City of St. Pete Beach.

SECTION 4. Conflicts. All ordinances or parts of ordinances, in conflict herewith are hereby repealed to the extent of any conflict with the Ordinance.

SECTION 5. Severability. In the event that any word(s), phrase(s), portion(s), sub-subsection(s), subsection(s), or section(s) of this article, is contrary to law, or against public policy, or shall for any reason whatsoever held to be invalid, illegal or unconstitutional, by any court of competent jurisdiction, such word(s), phrase(s), portion(s), sub-subsection(s), subsection(s), or section(s) of this article shall be null and void, and shall be deemed severed, and a separate, distinct, and independent provision from the remaining provisions of this article, and such holding shall in no manner affect the validity of the remaining words, phrases, portions, sub-subsections, subsections, or sections of this article, which shall remain in full force and effect. This article shall be construed in a manner to accomplish, to the greatest extent legally possible, the purposes of this article as expressed herein. Further, specifically, and without limitation, in the event any portion of this article, expressed or implied, causes this article or any portion thereof, to be determined to be a content-based regulation rather than a content-neutral regulation, then such portion of this article causing such determination shall be deemed severed, and it is declared the legislative intent of the city commission that the balance of this article would have been enacted absent such portion

SECTION 6. Scrivener’s Error. The City Attorney may correct scrivener’s errors found in this Ordinance by filing a corrected copy of this Ordinance with the City Clerk.

SECTION 7. Construction. This Ordinance is to be liberally construed to accomplish its objectives.

SECTION 8. Publication. This Ordinance shall be published in accordance with the requirements of law.

SECTION 9. Effective Date. This ordinance shall take effect immediately upon adoption.

Words ~~stricken~~ through shall be deleted. Words underscored constitute the amendment proposed. The symbol *** constitutes code sections not shown for purposes of brevity. Remaining provisions are now in effect and remain unchanged.

FIRST READING: _____
PUBLISHED: _____
SECOND READING: _____
PUBLIC HEARING: _____

CITY COMMISSION, CITY OF ST. PETE
BEACH, FLORIDA.

Adrian Petrila, Mayor

I, Amber LaRowe, City Clerk of the City of St. Pete Beach, Florida, do hereby certify that the foregoing Ordinance was duly adopted in accordance with the provisions of applicable law this _____ day of _____, 2025.

Amber LaRowe, City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

City Attorney

Words ~~stricken~~ through shall be deleted. Words underscored constitute the amendment proposed. The symbol *** constitutes code sections not shown for purposes of brevity. Remaining provisions are now in effect and remain unchanged.

EXHIBIT A

ARTICLE VI – NOISE PLAINLY AUDIBLE AT A DISTANCE IN A RESIDENTIAL LOCATION

Sec. 46-160 Authority and purpose/Intent.

This article is enacted under the home rule power of the City of St. Pete Beach in the interest of the health, peace, safety and general welfare. The purpose of this article is to regulate and reduce the noises within the city in order to preserve, protect and promote the public health, peace, comfort, safety and welfare, and the peace and quiet and quality of life of the inhabitants, both residents and visitors alike, of the city, prevent injury to human and animal life, preserve property values, foster the peace and comfort of the city's inhabitants, and facilitate the enjoyment of the natural attractions of the city. It is not the intent of this Article to negate or alter the provisions of other sections of this code of ordinances, including, but not limited to, Article IV, Noise, of Chapter 46, Environment, and Sec. 98-1, Hours for construction work restricted.

Sec. 46-161. Findings of facts.

Based on information and communications from city residents to city staff and city commissioners, the practical first-hand experience and observations of city commissioners, common sense deductions of city commissioners based on long term experiences in St. Pete Beach, information learned by city commissioners from various residents, and from research concerning the adverse health consequences of excessive noise, the city commission finds, recognizes, determines and declares:

- (1) It is the public policy of the city that every person is entitled to noise levels that are not detrimental to the life, health, comfort and peace of the city's residents and visitors, and to be free of excessive noise that interferes with the enjoyment of property in the city by its residents and its visitors.
- (2) Scholarly research has shown that exposure to excessive noise can have serious and long term negative physical and psychological health consequences which can include, but are not limited to, hearing impairment, hypertension, heart disease, sleep disturbance, changes in the immune system and increased incidence of diabetes. Research has also shown that adverse cardiovascular effects occur from chronic exposure to noise due to the sympathetic nervous system's inability to habituate. The sympathetic nervous system maintains lighter stages of sleep when the body is exposed to noise, which does not allow blood pressure to follow the normal rise and fall cycle of an undisturbed circadian rhythm.
- (3) Stress from time spent around elevated noise levels has been linked with increased accident rates and aggression and other anti-social behaviors.
- (4) It is recognized that excessive noise potentially lowers the value of nearby residences.

Words ~~stricken~~ through shall be deleted. Words underscored constitute the amendment proposed. The symbol *** constitutes code sections not shown for purposes of brevity. Remaining provisions are now in effect and remain unchanged.

-
- (5) Residents of the city have the right to have peace and quiet in and about their residences as well as in public areas, and be free from excessive noise, particularly during times and days when many residents typically relax and sleep.
 - (6) The city recognizes the importance of the provisions of the Florida Constitution, Art. 2, Sec. 7, relating to the abatement of excessive and unnecessary noise.
 - (7) It is hereby declared that the making, creation or maintenance of excessive noise within the city is a menace to the public health, comfort, safety, welfare, peace and the quality of life and prosperity of the people of the city. The provisions and prohibitions hereinafter contained and enacted are the minimum deemed to be necessary to protect the health, safety and welfare of the city and its residents and visitors.
 - (8) It is recognized that due to the intermittent character of some violations of this article, traditional methods of code enforcement with running fines, or citations which could merely be considered a cost of doing business by some commercial establishments, may not be effective means of deterrence of violations of this article. Therefore, it is found that in some cases, it is reasonable and appropriate, at the determination of the city commission, to provide for enforcement of this article through a request for equitable relief in the circuit court.

Sec. 46-162. Excessive noise declared a violation, the means and method of determining excessive noise and definition of residential location.

It is a violation of this code of ordinances for any person within the city to make, continue, cause, or allow to be made or continued, any excessive noise as more specifically described herein. This article sets forth a plainly audible at a distance in a residential location method by which noise can be determined to be "excessive noise" and therefore a violation of this code of ordinances. Residential location shall mean any location within the city limits of St. Pete Beach that has a zoning designation of RU-1, RU-2, or RLM-1, or which is the location of a single family residence, residential duplex/triplex/fourplex, multifamily development, residential condominium or cooperative apartment, or residential apartment.

Sec. 46-163. Declaration of public nuisance, and Declaration of irreparable and irreversible nature of noise violations.

It is hereby found and determined that excessive noise in the City of St. Pete Beach is a public nuisance, subject to injunction and abatement by a court of competent jurisdiction. It is also hereby found and determined that excessive noise in the City of St. Pete Beach is irreparable and irreversible in nature so as to justify enhanced fines and penalties.

Sec. 46-164. Enforcement.

Violations of this article may be investigated by any law enforcement officer and/or any St. Pete Beach code officer duly appointed by the city manager, (herein "investigating officer") and may be enforced through any, some, or all of the following:

- (a) A suit brought by the city in the circuit court to restrain, enjoin, or prevent a violation of this article.
- (b) Citation enforcement with the fines for such violations as set by the city commission.
- (c) Special magistrate proceedings.
- (d) Any other legal proceedings deemed appropriate by the city commission.

Sec. 46-165. Construction of article.

This article shall be liberally construed to accomplish its purpose of regulating excessive noise, protecting the character of St. Pete Beach, the health, safety, and general welfare of its residents and visitors, and the preservation of the quality of life in St. Pete Beach, and the quiet enjoyment by St. Pete Beach's residents of their residential property.

Sec. 46-166. Excessive noise determination under plainly audible at a distance in a residential location means, and method.

- (a) **Investigation.** Either in response to a complaint, or upon an investigating officer becoming otherwise aware of an alleged violation of this chapter, such investigating officer may proceed to investigate the alleged violation by the plainly audible at a distance in a residential location means or method of determining excessive noise as described hereinafter.
- (b) **Noise from an Originating Property (not on a dock over water body).** If the excessive noise originates in a location on land (and is not originating from a dock over a water body), the investigating officer shall determine the source of the noise being investigated (which location can be in any zoning category) and shall reasonably determine the relevant property lines of the real property that is the source of the noise being investigated (the "Originating Property"). The investigating officer may then, through physical measurement or other reliable source, determine a location which is both two hundred (200) feet or more from the property line of the Originating Property that is closest to the residential property (the "Receiving Property"). The investigating officer shall then, at that Receiving Property, use the officer's normal hearing faculties, not enhanced by any mechanical or medical device, such as a hearing aid, to determine whether the noise being investigated is plainly audible. As used herein, "property line" shall mean an imaginary line along the surface of land, and its vertical plane extension, which separates the real property owned, rented, controlled or leased by a person or entity from real property owned, rented, controlled or leased by another person, entity, or government. Where an Originating Property extends into a water body, the applicable property line abutting a water line of the Originating Property shall be the imaginary line, and its vertical plane extension, separating where the dry land touches the body of water, so that submerged lands, whether below dockage or not, and regardless of ownership of the submerged lands

or dockage, shall not be considered part of the Originating Property for purposes of making the two hundred (200) foot measurement.

- (c) **Noise from an Originating Location on a Dock over a water body.** If the excessive noise originates from a location that is on a dock over a water body, the investigating officer shall determine the source of the noise being investigated (which location can be in any zoning category, or no zoning category) and shall reasonably determine the distance of the dock (the "Originating Location") from the Receiving Property. The investigating officer may then, through physical measurement or other reliable source, determine a location which is both two hundred (200) feet or more from the Originating Location and is a residential property (the "Receiving Property"). The investigating officer shall then, at that Receiving Property, use the officer's normal hearing faculties, not enhanced by any mechanical or medical device, such as a hearing aid, to determine whether the noise being investigated is plainly audible.
- (d) **Means of Detection.** Investigating officers shall make a determination as to whether a noise is plainly audible, by using the following standards:
 - (1) The primary means of detection shall be by means of the officer's ordinary auditory senses, so long as the officer's hearing is not enhanced by any mechanical device, such as a microphone or hearing aid.
 - (2) The officer must have a direct line of hearing, to the area from which the noise is coming so that the officer can readily identify the source of the offending noise.
 - (3) The officer need not determine the particular words or phrases being produced or the name of any song or artist producing the noise. For example, the detection of a rhythmic bass reverberating type noise is sufficient to constitute a plainly audible noise.
- (e) **Prohibition.** No person shall permit, cause, allow, or create noise that is plainly audible in a residential location when that residential location is located no less than two hundred (200) feet from the Originating Location or the closest property line of the Originating Property.

Sec. 46-167. Exemptions.

The following shall be exempt from the definition of excessive noise contained in this article:

- (1) Yard and building maintenance machinery, equipment and tools operated between 7:00 a.m. and 8:00 p.m. when operated with all manufacturer's standard mufflers and noise-reducing equipment in use and in proper operating condition;
- (2) Construction operations between 7:00 a.m. and 8:00 p.m. Monday through Saturday, for which building permits have been issued, or for construction operations not requiring permits due to the scope of work or ownership of the project; provided all equipment used in the construction operations is operated in accordance with the manufacturer's specifications and with all standard equipment, manufacturer's mufflers and noise-reducing equipment in use and in proper operating condition;
- (3) Electrical or mechanical equipment in proper operating condition, installed and designed for the type of property or use upon which it is placed, providing air conditioning, heat, ventilation, plumbing or electrical service to the property on which it is placed;

- (4) Emergency generators used only during a loss of electrical power for any cause other than non-payment of utility services or failure to obtain or connect to available electrical service;
- (5) Aircraft operated in conformity with, or pursuant to, federal law, federal air regulations and air traffic control instructions;
- (6) Operations of interstate motor and rail carriers, to the extent that local regulation of noise levels of such vehicles has been preempted by the Noise Control Act of 1972 (42 U.S.C. § 4901 et seq.) or other applicable federal laws or regulations;
- (7) Operation of motor vehicles to the extent regulated by Section 316.293 Florida Statutes;
- (8) Sanitation operations including the unloading, emptying or collection of any waste or recycling container;
- (9) Noises created by vehicles or equipment owned or operated by governmental entities including the City of St. Pete Beach, Pinellas County, Pinellas County Public Schools, the State of Florida, the Federal Government, or their designees, when such vehicles or equipment are engaged in emergency operations, including operations during or following storms, accidents, or other catastrophes;
- (10) Noises created by vehicles or equipment owned or operated by governmental entities including the City of St. Pete Beach, Pinellas County, Pinellas County Public Schools, the State of Florida, the Federal Government, or their designees, when such vehicles or equipment are engaged in construction operations; and
- (11) Noises during times and/or at locations as specifically designated by resolution of the city commission upon request to the city commission and upon good cause shown.

Sec. 46-168. Severability.

In the event that any word(s), phrase(s), portion(s), sub-subsection(s), subsection(s), or section(s) of this article, is contrary to law, or against public policy, or shall for any reason whatsoever held to be invalid, illegal or unconstitutional, by any court of competent jurisdiction, such word(s), phrase(s), portion(s), sub-subsection(s), subsection(s), or section(s) of this article shall be null and void, and shall be deemed severed, and a separate, distinct, and independent provision from the remaining provisions of this article, and such holding shall in no manner affect the validity of the remaining words, phrases, portions, sub-subsections, subsections, or sections of this article, which shall remain in full force and effect. This article shall be construed in a manner to accomplish, to the greatest extent legally possible, the purposes of this article as expressed herein. Further, specifically, and without limitation, in the event any portion of this article, expressed or implied, causes this article or any portion thereof, to be determined to be a content-based regulation rather than a content-neutral regulation, then such portion of this article causing such determination shall be deemed severed, and it is declared the legislative intent of the city commission that the balance of this article would have been enacted absent such portion.

M E M O R A N D U M

TO: Mayor, Vice-Mayor and City Commissioners
COPIES: Frances Robustelli, City Manager; Brandon Berry; Denise Sanderson;
Jennifer Daunch; Peyt Dewar; Kristin Coman; Amber LaRowe
FROM: Gretchen R. H. ("Becky") Vose, Esq., City Attorney
DATE: January 22, 2025
SUBJECT: Proposed New Noise Ordinance – Plainly audible at a distance standard

Some questions have been raised as to the constitutionality of the "plainly audible" at a distance standard for a noise ordinance based upon the Florida Supreme Court case of *State v. Catalano*, 104 So.2d 1069 (Fla. 2012). The confusion is based on a mixed opinion by the Florida Supreme Court in that case which was a challenge to a Florida Statute that made it "unlawful for any person operating a motor vehicle ... to operate or amplify the sound produced by a radio, tape player, or other mechanical soundmaking device or instrument ... so that the sound is ... plainly audible at a distance of 25 feet or more from the motor vehicle." The statute exempted "motor vehicles used for business or political purposes, which in the normal course of conducting such business use soundmaking devices." The ultimate decision of the Florida Supreme Court was that the statute was unconstitutional; however, the court made it clear, that the basis for the finding of unconstitutionality was based on the "content based" exception in the statute for noise with a business or political content. The Florida Supreme Court also made it clear that the noise standard of "plainly audible" at a distance was a valid (and not unconstitutional) standard for noise regulations.

In *Catalano*, the Florida Supreme Court held that the "plainly audible" standard in FS Sec. 316.3045(1)(a) "is not unconstitutionally vague," but the court made it clear that the statute being challenged "is unconstitutionally overbroad and an impermissible content-based restriction." *Catalano* at 1075. The content based restriction was the exception and preference for noise related to business and politics. This content based exception in the statute led the court in *Catalano* to find the statute to be overbroad due to the restrictions being content based, and therefore subject to a "strict scrutiny" standard of review.

Importantly, the Court specifically held that the "plainly audible" standard was *not* unconstitutionally vague and was a valid method of putting (non-content based) restrictions on noise. The Court opined that:

"Indeed, several jurisdictions both in Florida and around the country have upheld similar statutes in the face of vagueness challenges. *See, e.g., Montgomery v. State*, 69 So.3d 1023, 1032 (Fla. 5th DCA 2011) (holding section 316.3045(1)(a) is not unconstitutionally vague, but finding the statute unconstitutionally overbroad as an impermissible content-based restriction); *Davis v. State*, 710 So.2d 635, 636 (Fla. 5th DCA 1998) (upholding pre-2005 amendment version of section 316.3045(1)(a), which required that amplified sound be plainly audible more than one-hundred feet from the vehicle, as not unconstitutionally vague); *State v.*

COUNSEL TO EXTRAORDINARY GOVERNMENTS & LEADERS THROUGHOUT FLORIDA SINCE 1973

Medel, 139 Idaho 498, 80 P.3d 1099, 1103 (Ct.App. 2003) (upholding ordinance as not unconstitutionally vague where it prohibited operating a vehicle's sound system so that it is audible at a distance of fifty feet); Davis v. State, 272 Ga. 818, 537 S.E.2d 327, 328-29 (2000) (finding that a statute which prohibits amplified sound from a vehicle which is "plainly audible" at 100 feet is not vague and stating that it would belie credibility to find that persons of ordinary intelligence do not know what it means for amplified sound to be "plainly audible" at a distance greater than one-hundred feet); People v. Hodges, 70 Cal.App.4th 1348, 83 Cal.Rptr.2d 619, 622 (1999) (ordinance prohibiting a vehicle's sound system from operating where it could be heard twenty-five feet away not unconstitutionally vague); Moore v. City of Montgomery, 720 So.2d 1030, 1032 (Ala.Crim.App.1998) (holding ordinance that prohibited sound audible five feet from vehicle not unconstitutionally vague and stating that finding otherwise belies credibility); Holland v. City of Tacoma, 90 Wash.App. 533, 954 P.2d 290, 295 (1998), review denied, 136 1077*1077 Wash.2d 1015, 966 P.2d 1278 (1998) (finding ordinance not unconstitutionally vague as the court noted that a person of ordinary intelligence knows what is meant by prohibition of sound that is audible more than fifty feet away); Com. v. Scott, 878 A.2d 874, 878-79 (Pa.Super.Ct.2005). Additionally, the United States Supreme Court has rejected vagueness challenges to arguably more subjective terms. See Kovacs v. Cooper, 336 U.S. 77, 78, 69 S.Ct. 448, 93 L.Ed. 513 (1949) (upholding constitutionality of a sound ordinance that prohibited the use of a sound-generating instrument that produces loud and raucous sound on vehicles); Grayned, 408 U.S. at 107-08, 92 S.Ct. 2294 (upholding constitutionality of a sound ordinance that prohibited sound that disturbed or tended to disturb the peace). **Thus, we find that the "plainly audible" standard is not unconstitutionally vague.** We now discuss whether the statute is unconstitutionally overbroad or an unreasonable restriction on the freedom of expression." [Emphasis supplied.]

Again, the negative finding in *Catalano* related to the exemptions for political or commercial speech. The court held that:

"The regulation, however, treats commercial and political speech more favorably than noncommercial speech. Additionally, the statute does not have to intentionally suppress certain ideas to be constitutionally suspect as a content-based restriction. See City of Cincinnati v. Discovery Network, Inc., 507 U.S. 410, 429, 113 S.Ct. 1505, 123 L.Ed.2d 99 (1993) 1079*1079 (citing Simon & Schuster, Inc. v. Members of N.Y. State Crime Victims Bd., 502 U.S. 105, 117, 112 S.Ct. 501, 116 L.Ed.2d 476 (1991)). Regardless of the intent of the Legislature, section 316.3045 is a sweeping ban on amplified sound that can be heard beyond twenty-five feet of a motor vehicle, unless that sound comes from a business or political vehicle, which presumably uses sound-making devices for the purpose of expressing commercial and political viewpoints. For instance, business and political vehicles may amplify commercial or political speech at any volume, whereas an individual traversing the

highways for pleasure would be issued a citation for listening to any type of sound, whether it is religious advocacy or music, too loudly. **Thus, this statute is content based because it does not apply equally to music, political speech, and advertising.** See *Discovery Network*, 507 U.S. at 428-29, 113 S.Ct. 1505 (stating that **a sound ordinance is permissible if it applies equally to music, political speech, and advertising**). Accordingly, this statute is subject to the strict scrutiny analysis to determine whether it is a reasonable restriction or unconstitutionally overbroad.

“This right, nevertheless, is subject to reasonable limitations on the time, place, and manner of the protected speech. Limitations are reasonable if they are “justified **without reference to the content of the regulated speech**, ... narrowly tailored to serve a significant governmental interest, and ... leave open ample alternative channels for communication of the information.” *Ward*, 491 U.S. at 791, 109 S.Ct. 2746. **If the time, place, and manner of the limitations are content based, a strict standard of scrutiny is applied.** See, e.g., *Simmons v. State*, 944 So.2d 317, 323 (Fla.2006).” [Emphasis supplied.]

The City of St. Pete Beach currently has noise ordinances that essentially use two different standards.

The first is based on decibel readings (Sec. 46-132). Such readings must be taken by calibrated sound level meters by users who are certified to use the meters. It is problematic to take decibel readings in the “real world” since based on the ordinance (and based on standards that would be imposed regardless of the requirements of the ordinance) “[t]o determine the sound level from the sound source to be measured, the background sound shall be subtracted from the ambient sound level.” Therefore, somehow the person measuring the sound would have to take two measurements, one of the background noise, and the second of the noise from the source to be measured. Considering that background noise includes fluctuating traffic noise, noise from passing boats, noise from wind and waves, etc., the measurement of “background noise” alone is problematic. And how do you stop the noise that you intend to measure (such as the noise from a loud band or a stereo system) in order to measure the “background noise”? It is not surprising that decibel readings are an inconvenient and difficult method of measuring for a noise violation.

The second standard in the City’s current noise ordinances (Sec. 46-133) is the “loud and raucous” noise standard. Under that ordinance, “[l]oud and raucous shall mean any sound that, because of its volume level, duration and character, annoys, disturbs, injures or endangers the comfort, health, peace or safety of reasonable persons of ordinary sensibilities.” Although there is case law supporting this standard, it is understandable that there could certainly be differences of opinions as to what sounds constitute “loud and raucous” noise.

The proposed noise ordinance uses a common sense, constitutional method of addressing noise received in residential areas of the city. The issue came to my attention after becoming involved with the Red, White and Booze lawsuit and learning that although noise issues seriously plagued

the residential areas across the water from that establishment for a substantial period of time, there were no “noise violations” that were actually issued against the business.

The ordinance that I have proposed in St. Pete Beach is almost identical to the noise ordinance that was adopted by the City of Cocoa Beach in the summer of 2023. That city already had other methods of enforcing noise problems, but those had not been effective to control noise in the city, particularly noise from bars that was disruptive to residents in residential areas. When Cocoa Beach adopted the plainly audible at a distance standard, the problems were quickly resolved. The businesses that were causing the problems learned quickly that they could be caught and cited and they came into compliance. In particular, the bars made efforts to keep the music within their establishments and not allow it to carry out into residential areas. Today I called the Chief of Police in Cocoa Beach and asked for an update as to noise issues, and the Chief confirmed that the new ordinance had resolved what had been serious issues.

If anyone has any questions or concerns about this proposed ordinance, please contact me.

Amber LaRowe, City Clerk
City Hall, City Clerk's Office
155 Corey Avenue
St. Pete Beach, FL 33706
February 2, 2025
CERTIFIED MAIL: 7020 2450 0001 0300 9908

PLEASE CORRESPOND TO:
GEOFFREY CAPUTO
4604 49TH ST. N #140
KENNETH CITY, FL. 33709
FLORIDAREPUBLIC@GMAIL.COM

RE: Public Records Request for Documentation Supporting Noise Ordinance Justification

Notice to Principal is Notice to Agents and Notice to Agents is Notice to Principal; Moreover, the enclosed is notice to all Assigns and Successors of the addressed Office or the like. The term "or the like" means any office that is styled in an analogous or similar manner as the addressed. And to negate misnomers or other affiliations which would prevent any Party from being personally liable as a natural person or man or woman, any configuration of the name of any Party addressed herein means and includes the full legal or Christian name of any such Party addressed.

Greetings Clerk LaRowe,

I am submitting this Public Records Request for Documentation Supporting Noise Ordinance Justification (*"documents request"*, or *"DR" herein*) pursuant to Florida Statute § 119 for access to public records related to the new noise ordinance passed by the City Commission of St. Pete Beach.

There were six factual allegations claimed by the council as the rationalization for passing the ordinance described in the city council agenda titled, *"CITY COMMISSION MEETING CITY OF ST. PETE BEACH, Agenda Report: Consider adoption of additional clearly audible, nuisance based standard in the noise ordinance"*, and dated January 28, 2025.

Therefore documents are hereby requested which consist of the six categories (DR1-6): **Health Impact Studies, Community Feedback Records, Economic Impact Assessments, Legal Memos or Opinions, Enforcement Records, and Business Impact Estimates**

Response Timeline and Implications:

Initial Response (IR): I request that you provide the documents listed below within 30 calendar days from the receipt date of this letter.

Notice of Fault (NOF): Should there be no response or if the response does not include the requested documents or provides irrelevant information within this period, I will consider this a fault in good faith response. I will issue a second notice, granting an additional 7 calendar days for the city to correct this oversight.

Notice of Administrative Default (NOAD): After this additional 7-day period, should there continue to be no relevant response or if the documents remain undisclosed, I will issue a Notice of Administrative Default. This would indicate that all administrative remedies have been exhausted, demonstrating the city's unwillingness or inability to provide the requested documentation.

Mediation (MED): The issuance of the NOAD would serve as a basis for seeking mediation through the Florida Attorney General's Public Records Mediation Program, as the next step to resolve this dispute and ensure compliance with public records law.

I. REQUESTED FORMAT FOR DOCUMENTS REQUEST

Understanding that the volume of records over the past three years could be significant, I propose the following strategy to manage this request:

Initial Tally Request: For your first response, please provide only a tally each of the following document requests 1-6 below by number and category, and then followed by the cost. If cost estimates will delay the tally, please provide tally only ASAP as priority. For each of the following document categories 1-6, I request a tally of the number of records available from the past three years: For each of the six categories of records, please format as follows

- Document Request (*DR*) Number [*DR1, DR2, DR3a, 3b, etc...*]
Total Number of Records: [Specify Quantity]
Yearly Breakdown:
2021: [Quantity]
2022: [Quantity]
2023: [Quantity]
2024: [Quantity]
2025: [Quantity] (up to the current date)

A SAMPLE DOCUMENT REQUEST TALLY TABLE IS PROVIDED ON PAGE 8 OF THIS COMMUNICATION.

If No, such record(s) exist, please quantify in the format described above with a zero, "0" in the Document Request Tally Table, or classified by document request number and category.

If such records exist and are exempt from disclosure:

Redaction: Pursuant to Florida Statute § 119.07(1)(d), please redact those portions exempt from disclosure and provide the non-exempt remainder.

Complete Exemption: If the record is completely exempt, pursuant to Florida Statute § 119.07(1)(e), state which record and the basis of the exemption, including the statutory citation.

Written Explanation: Also, pursuant to Florida Statute § 119.07(1)(f), provide in writing and with particularity the reasons for the conclusion that the record is exempt or confidential.

Reminder: Under Florida Statute § 119.07(1)(c), you are required to acknowledge this request promptly and respond in good faith. This includes making reasonable efforts to determine from other officers or employees within the agency whether the requested records exist. Failure to respond promptly or to clarify whether records do or do not exist will be interpreted by the undersigned as not acting in good faith.

Understanding Volume and Cost:

I acknowledge that the complete retrieval of these records might be voluminous, potentially requiring significant effort and cost. Therefore, I am willing to pay for the retrieval, copying, or any other associated costs for these documents. Please provide an estimate of these costs based on the tally table provided on page 8.

Pending Full Retrieval:

Upon receiving the tally with cost estimate, I will confirm my commitment to proceed with the full retrieval of the records. If cost estimates delay tally, please send tally only as a priority.

II. DOCUMENT REQUEST CATEGORIES 1-6 (DR 1-6, HEREIN)

Pursuant to the city council agenda titled "*CITY COMMISSION MEETING CITY OF ST. PETE BEACH, Agenda Report: Consider adoption of additional clearly audible, nuisance based standard in the noise ordinance*" dated January 28, 2025, I am submitting this request under Florida Statute § 119 for access to public records related to the new noise ordinance in St. Pete Beach. Digital Copies: **If possible, digital copies are preferred** in order to facilitate analysis, especially for large datasets or reports.

1. **DR1: Health Impact Studies (HIS):** Documentation or research cited by the City Commission to support claims about the health impacts of excessive noise.

- a. Local or regional studies on health impacts of noise pollution.
- b. Data from health departments or universities on noise-related health issues

2. **DR2 Community Feedback Records (CFR) :** All records of community feedback, including but not limited to complaints, surveys, town hall meeting minutes, or public comments from the last three years, specifically addressing noise issues in St. Pete Beach. Any feedback that explicitly discusses the impact of noise on quality of life, health, or property values. any digital records like emails or social media posts where community members have voiced their opinions on noise, especially if these platforms were used for official feedback collection.

3. **DR3 Economic Impact Assessments (EIA):** Studies or reports linking noise levels to property value depreciation within St. Pete Beach or comparable areas. (note: please index each as "DR3a, 3b, etc...)

- a. Historical Property Value Data:
 - Assessments and Tax Records: property assessment data for areas near known noise sources compared to quieter areas over a significant period which demonstrate trends in property value changes.
- b. Appraisal Reports:
 - Specific Appraisals: Appraisals of properties close to venues or areas where noise complaints are common, which could reflect comments or adjustments made due to noise.
- c. Comparative Sales Data:
 - Sales Records: Documentation showing sales prices of properties in noisy areas vs. quieter areas to establish if there's a noticeable difference or decline over time due to noise.
- d. Real Estate Market Analyses:
 - Market Reports: Any market analyses, especially those done by real estate firms or city departments, that discuss factors affecting property values, including noise.
- e. Noise Level Measurements:
 - Noise Studies: Any studies or measurements conducted by the city or third parties that correlate specific noise levels with property values in St. Pete Beach.

- f. Expert Testimonies or Opinions:
 - Expert Reports: If the city has engaged experts to discuss the impact of noise on property values, ask for these reports or any presentations made to the city commission.
- g. Public Feedback and Complaints:
 - Surveys or Public Comments: Records of public feedback where noise affecting property value or livability was explicitly mentioned by residents.
- h. Economic Impact Assessments:
 - Business Impact Studies: If there's a broader economic study, it might include data on how noise affects property values indirectly through business health or tourism.
- i. Zoning and Development Impact:
 - Zoning Changes: Documentation on zoning decisions or changes made in response to or in anticipation of noise issues, which might reflect an acknowledgment of noise impact on property values.
- j. Academic or Industry Research:
 - Citations or Studies: Any academic research or industry white papers cited by city officials in support of the noise-property value correlation.
- k. Mitigation Efforts:
 - Details on any noise mitigation projects undertaken by the city in the last decade, including before-and-after studies or predictions on how these projects would or did affect property values."

4. **DR4: Legal Memos or Opinions (LMO):** Any legal analysis or correspondence justifying the alignment of the new noise ordinance with existing state laws or local ordinances.

5. **DR5: Enforcement Records (ER):** Enforcement records related to noise violations over the last three years in St. Pete Beach. Include:

- a. Number of citations issued per year for noise violations,
- b. Locations where these violations were most frequent.
- c. Outcomes of these enforcement actions (e.g., fines paid, cases dismissed, court rulings).
- d. Any internal or external reviews assessing the effectiveness of noise enforcement in reducing noise levels or complaints.
- e. Any GIS mapping or data visualizations if available, showing where and how often noise enforcement actions have occurred in relation to residential and commercial zones


6. **DR6: Business Impact Estimates (BIE):** The complete business impact estimate prepared under Florida Statute 166.041(4) for the new noise ordinance, including:

- a. Detailed analyses or projections on how the ordinance might affect local businesses, particularly those in the hospitality and entertainment sectors.
- b. Any data or models used to estimate changes in business revenue, customer traffic, or operational costs due to the new noise regulations.
- c. Correspondence or minutes from meetings where this estimate was discussed or presented to the City Commission.
- d. Records of consultations with local business organizations or chambers of commerce,, including any feedback or concerns raised by businesses.

Contact for Costs: Along with the Document Tally Table and associated costs, if digital copies are not available via email, and if there are any additional costs associated with copying or providing these documents, please contact me at

Geoffrey Caputo
4604 49TH ST. N #140
KENNETH CITY, FL. 33709
FLORIDAREPUBLIC@GMAIL.COM

Thank you for your prompt attention to this matter.

Sincerely, 

Geoffrey Caputo

III. AFFIDAVIT IN SUPPORT OF DOCUMENTS REQUESTS 1-6 (DR1-6)

STATE OF FLORIDA
COUNTY OF PINELLAS

I certify that this is a true and exact copy of the original document presented to me by Geoffrey Caputo.

D. Holloway



Deshaun Holloway
Comm.: HH 614469
Expires: Nov. 20, 2028
Notary Public - State of Florida

I, Geoffrey Caputo, being duly sworn, depose and state as follows:

Pursuant to the factual allegations forming the basis for the proposed noise ordinance, **COMMISSION MEETING CITY OF ST. PETE BEACH, Agenda Report: Consider adoption of additional clearly audible, nuisance based standard in the noise ordinance** dated January 28, 2025,

1. **DR1:** Affiant has not seen nor been presented with any material facts or evidence demonstrating the existence of any Health Impact Studies, and I deny that such records exist.
2. **DR2:** Affiant has not seen nor been presented with any material facts or evidence demonstrating the existence of any Community Feedback Records, and I deny that such records exist.
3. **DR3:** Affiant has not seen nor been presented with any material facts or evidence demonstrating the existence of any Economic Impact Assessments related to property values, and I deny that such records exist.
4. **DR4:** Affiant has not seen nor been presented with any material facts or evidence demonstrating the existence of any legal analysis or correspondence justifying the alignment of the new noise ordinance with existing state laws or local ordinances, and I deny that such records exist.
5. **DR5:** Affiant has not seen nor been presented with any material facts or evidence demonstrating the existence of any Enforcement Records data on noise violations, citations, and enforcement actions under the current or previous noise ordinances to demonstrate the effectiveness or lack thereof.
6. **DR6:** Affiant has not seen nor been presented with any material facts or evidence demonstrating the existence of Business Impact Estimate prepared under Florida Statute 166.041(4) regarding the business impact of the proposed noise ordinance, and I deny that such records exist.

Conclusion: This affidavit is submitted in good faith to support my public records request to the City of St. Pete Beach, should I not have received any tally of, or any documentation or evidence that would substantiate the claims made by the city in relation to the noise ordinance discussed in the city council meeting on January 28, 2025. My aim is to ensure transparency and compliance with Florida Statute § 119 by documenting my experience and the absence of evidence provided by the city regarding the aforementioned document requests.

FURTHER AFFIANT SAYETH NOT.

Geoffrey Caputo

, February 2, 2025

Sworn to and subscribed before me this 2nd day of February 2025 by Geoffrey Caputo has produced identification via Florida Drivers License C-130-290-70-305-0.

Notary Public

D. Holloway



Deshaun Holloway
Comm.: HH 614469
Expires: Nov. 20, 2028
Notary Public - State of Florida

My Commission Expires: *Nov 20, 2028*

IV. MEMORANDA OF LAW FOR AFFIDAVIT IN SUPPORT OF DR1-6

Preliminary Statement:

While this matter does not yet constitute a docketed court case, the undersigned, as the Affiant, asserts that the absence of documentation in response to the public records request can be construed as a "default admission" *on the administrative level* by the City of St. Pete Beach that no such records exist, pending their production.

1. Must The Common Law of England be recognized by all Florida Courts?
 - Florida Statutes 2.01 and 775.01: These statutes confirm that the common law of England, not inconsistent with modern law, is enforceable in Florida. Thus, applicable common law principles must be recognized.
2. Are there Common Law Maxims which express that silence constitutes consent or admission?
Relevant Maxims:
 - Qui tacet consentire videtur - "He who is silent appears to consent."
 - Tacita quaedam habentur pro expressis - "Things silent are sometimes considered as expressed."
 - Ejus est non nolle, qui potest velle - "He who may consent tacitly, may consent expressly."

These maxims support the notion that silence or lack of response can be interpreted as an admission or consent in legal contexts.

3. Do Courts recognize Sir William Blackstone as authoritative in interpreting the Common Law of England?

Decisions like *Wilson v. Arkansas*, *Adickes v. S.H. Kress and Company*, and *Coventry First v. State* affirm Blackstone's authority in interpreting common law.

4. Must Florida Courts recognize the Common Law Maxims above?
 - Blackstone's Commentary: Volume 1 § 82 acknowledges maxims as rules of common law based on custom and usage.
 - Therefore, if Florida courts observe these maxims, they must recognize them as part of the common law applicable in Florida.
5. Do Florida courts observe, as a matter of custom and usage, the principles of the maxims above?

Florida Case Law: Cases such as *Elliott v. Aurora Loan Serv.*, *Vacation Ventures v. Holiday Promo.*, *Rafal v. Mesick*, *Weiss v. Leatherberry*, and *Horowitz v. Laske* demonstrate that silence or failure to counter with evidence shifts judicial favor towards the party making uncontradicted assertions.

Conclusion:

Based on the common law principles and Florida case law cited, the Affiant asserts that the City's failure to respond or produce the requested documents should be interpreted administratively as a "default admission" that no such records exist, unless and until such records are produced. This interpretation is grounded in the legal tradition where silence can be deemed an admission, especially in the context of sworn statements (affidavits) and the absence of counter-affidavits or evidence. The city's non-response thus serves as an implicit acknowledgment under common law maxims, justifying the Affiant's claim of an administrative "default admission" pending production of the documents.

Submitted this 2nd day of February, 2025 _____, Geoffrey Caputo

DOCUMENT REQUEST TALLY							
	EXEMPT (Y or N)	2021	2022	2023	2024	2025	2021-2025 SUB TOTALS
DR1 a-b							
a							
b							
DR2							
DR3 a-k							
a							
b							
c							
d							
e							
f							
g							
h							
i							
j							
k							
DR4							
DR5 a-e							
a							
b							
c							
d							
e							
DR4 a-d							
a							
b							
c							
d							
YEARLY SUB TOTALS							
						2021-2025 GRAND TOTAL DR1-6	
						COST	\$_____

Adrian Petrila
Mayor, St. Pete Beach,
City Hall
155 Corey Avenue
St. Pete Beach, FL 33706
February 3, 2025

PLEASE CORRESPOND TO:
GEOFFREY CAPUTO
4604 49TH ST. N #140
KENNETH CITY, FL. 33709
FLORIDAREPUBLIC@GMAIL.COM

CERTIFIED MAIL: 7020 2450 0001 0300 9939

RE: Notice of City Clerk In Receipt of Public Records Request for Documentation Supporting Noise Ordinance Justification

Notice to Principal is Notice to Agents and Notice to Agents is Notice to Principal;

Greetings Mayor Petrila,

I have dispatched the Public Records Request for Documentation Supporting Noise Ordinance Justification (hereinafter "documents request" or "DR") to City Clerk Amber LaRowe via USPS certified mail, tracking number 7020 2450 0001 0300 9908.

This request seeks documents from six categories (DR1-6), each corresponding to the factual allegations presented by the council during their meeting on January 28, 2025:

Health Impact Studies
Community Feedback Records
Economic Impact Assessments

Legal Memos or Opinions
Enforcement Records
Business Impact Estimates

I assume the city's commitment to transparency will shine through, ensuring that this request is handled with the diligence one would expect from an institution that prides itself on openness. Should any aspects of the law be unclear, (*such as due process, estoppel, laches, and the duty of good faith that may be pertinent to this matter*) I trust the city's legal advisors will clarify matters, as ignorance of the law, as they say, is no excuse.

I look forward to a response that reflects St. Pete Beach's exemplary standards in public records management.

Constitutionally Yours,

 , Geoffrey Caputo

ATTACHMENT: Public Records Request for Documentation Supporting Noise Ordinance Justification sent to City Clerk Amber LaRowe USPS certified mail 7020 2450 0001 0300 9908

cc: Karen Marriott Commissioner, District 1 / Lisa Robinson Commissioner, District 2 / Betty Rzewnicki Commissioner, District 3 / Joe Moholland Commissioner, District 4 / Ralf Brooks, Interim City Attorney

Karen Marriott
Commissioner, District 1
City Hall
155 Corey Avenue
St. Pete Beach, FL 33706
February 3, 2025
CERTIFIED MAIL: 7020 2450 0001 0300 9922

PLEASE CORRESPOND TO:
GEOFFREY CAPUTO
4604 49TH ST. N #140
KENNETH CITY, FL. 33709
FLORIDAREPUBLIC@GMAIL.COM

RE: Notice of City Clerk In Receipt of Public Records Request for Documentation Supporting Noise Ordinance Justification

Notice to Principal is Notice to Agents and Notice to Agents is Notice to Principal;

Greetings Commissioner Marriott

I have dispatched the Public Records Request for Documentation Supporting Noise Ordinance Justification (hereinafter "documents request" or "DR") to City Clerk Amber LaRowe via USPS certified mail, tracking number 7020 2450 0001 0300 9908.

This request seeks documents from six categories (DR1-6), each corresponding to the factual allegations presented by the council during their meeting on January 28, 2025:

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Constitutionally Yours,

 , Geoffrey Caputo

ATTACHMENT: Public Records Request for Documentation Supporting Noise Ordinance Justification sent to City Clerk Amber LaRowe USPS certified mail 7020 2450 0001 0300 9908

cc: Adrian Petrila, Mayor / Lisa Robinson Commissioner, District 2 / Betty Rzewnicki Commissioner, District 3 / Joe Moholland Commissioner, District 4 / Ralf Brooks, Interim City Attorney

Lisa Robinson
Commissioner, District 2
City Hall
155 Corey Avenue
St. Pete Beach, FL 33706
February 3, 2025

PLEASE CORRESPOND TO:
GEOFFREY CAPUTO
4604 49TH ST. N #140
KENNETH CITY, FL. 33709
FLORIDAREPUBLIC@GMAIL.COM

CERTIFIED MAIL: 7020 2450 0001 0300 9915

RE: Notice of City Clerk In Receipt of Public Records Request for Documentation Supporting Noise Ordinance Justification

Notice to Principal is Notice to Agents and Notice to Agents is Notice to Principal;

Greetings Commissioner Robinson,

I have dispatched the Public Records Request for Documentation Supporting Noise Ordinance Justification (hereinafter "documents request" or "DR") to City Clerk Amber LaRowe via USPS certified mail, tracking number 7020 2450 0001 0300 9908.

This request seeks documents from six categories (DR1-6), each corresponding to the factual allegations presented by the council during their meeting on January 28, 2025:

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I look forward to a response that reflects St. Pete Beach's exemplary standards in public records management.

Constitutionally Yours,



, Geoffrey Caputo

ATTACHMENT: Public Records Request for Documentation Supporting Noise Ordinance Justification sent to City Clerk Amber LaRowe USPS certified mail 7020 2450 0001 0300 9908

cc: Adrian Petrla, Mayor / Karen Marriott Commissioner, District 1 / Betty Rzewnicki Commissioner, District 3 / Joe Moholland Commissioner, District 4 / Ralf Brooks, Interim City Attorney

Betty Rzewnicki
Commissioner, District 3
City Hall
155 Corey Avenue
St. Pete Beach, FL 33706
February 3, 2025

PLEASE CORRESPOND TO:
GEOFFREY CAPUTO
4604 49TH ST. N #140
KENNETH CITY, FL. 33709
FLORIDAREPUBLIC@GMAIL.COM

CERTIFIED MAIL: 7020 2450 0001 0277 5712

RE: Notice of City Clerk In Receipt of Public Records Request for Documentation Supporting Noise Ordinance Justification

Notice to Principal is Notice to Agents and Notice to Agents is Notice to Principal;

Greetings Commissioner Rzewnicki,

I have dispatched the Public Records Request for Documentation Supporting Noise Ordinance Justification (hereinafter "documents request" or "DR") to City Clerk Amber LaRowe via USPS certified mail, tracking number 7020 2450 0001 0300 9908.

This request seeks documents from six categories (DR1-6), each corresponding to the factual allegations presented by the council during their meeting on January 28, 2025:

Health Impact Studies
Community Feedback Records
Economic Impact Assessments

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Business Impact Estimates

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Constitutionally Yours,



, Geoffrey Caputo

ATTACHMENT: Public Records Request for Documentation Supporting Noise Ordinance Justification sent to City Clerk Amber LaRowe USPS certified mail 7020 2450 0001 0300 9908

cc: Adrian Pettila, Mayor / Karen Marriott Commissioner, District 1 / Lisa Robinson Commissioner, District 2 / Joe Moholland Commissioner, District 4 / Ralf Brooks, Interim City Attorney

Joe Moholland
Commissioner, District 4
City Hall
155 Corey Avenue
St. Pete Beach, FL 33706
February 3, 2025

PLEASE CORRESPOND TO:
GEOFFREY CAPUTO
4604 49TH ST. N #140
KENNETH CITY, FL. 33709
FLORIDAREPUBLIC@GMAIL.COM

CERTIFIED MAIL: 7020 2450 0001 0277 5729

RE: Notice of City Clerk In Receipt of Public Records Request for Documentation Supporting Noise Ordinance Justification

Notice to Principal is Notice to Agents and Notice to Agents is Notice to Principal;

Greetings Commissioner Moholland,

I have dispatched the Public Records Request for Documentation Supporting Noise Ordinance Justification (hereinafter "documents request" or "DR") to City Clerk Amber LaRowe via USPS certified mail, tracking number 7020 2450 0001 0300 9908.

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I look forward to a response that reflects St. Pete Beach's exemplary standards in public records management.

Constitutionally Yours,



, Geoffrey Caputo

ATTACHMENT: Public Records Request for Documentation Supporting Noise Ordinance Justification sent to City Clerk Amber LaRowe USPS certified mail 7020 2450 0001 0300 9908

cc: Adrian Petrila, Mayor / Karen Marriott Commissioner, District 1 / Lisa Robinson Commissioner, District 2 / Betty Rzewnicki Commissioner, District 3 / Ralf Brooks, Interim City Attorney

Ralf Brooks
Interim City Attorney
City Hall
155 Corey Avenue
St. Pete Beach, FL 33706
February 3, 2025

PLEASE CORRESPOND TO:
GEOFFREY CAPUTO
4604 49TH ST. N #140
KENNETH CITY, FL. 33709
FLORIDAREPUBLIC@GMAIL.COM

CERTIFIED MAIL: 7020 2450 0001 0277 5736

RE: Notice of City Clerk In Receipt of Public Records Request for Documentation Supporting Noise Ordinance Justification

Notice to Principal is Notice to Agents and Notice to Agents is Notice to Principal;

Greetings Interim City Attorney Brooks,

I have dispatched the Public Records Request for Documentation Supporting Noise Ordinance Justification (hereinafter "documents request" or "DR") to City Clerk Amber LaRowe via USPS certified mail, tracking number 7020 2450 0001 0300 9908.

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I look forward to a response that reflects St. Pete Beach's exemplary standards in public records management.

Constitutionally Yours,

 , Geoffrey Caputo

ATTACHMENT: Public Records Request for Documentation Supporting Noise Ordinance Justification sent to City Clerk Amber LaRowe USPS certified mail 7020 2450 0001 0300 9908

cc: Adrian Petrla, Mayor / Karen Marriott Commissioner, District 1 / Lisa Robinson Commissioner, District 2 / Betty Rzewnicki Commissioner, District 3 / Joe Moholland Commissioner, District 4

To: Amber LaRowe, City Clerk
City Hall, City Clerk's Office
155 Corey Avenue
St. Pete Beach, FL 33706
Date: March 8, 2025
Cert # 7020 2450 0001 0277 5118

NOTICE OF FAULT / FOLLOW-UP - PUBLIC RECORDS REQUEST

Dear City Clerk LaRowe,

A public records request reached your office on the 5th of February 2025 via USPS Certified Mail (Tracking Number: 7020 2450 0001 0300 9908), tied to Ordinance 2025-02's first reading—the noise ordinance. It covered Health Impact Studies, Community Feedback Records, Economic Impact Assessments, Legal Memos, Enforcement Records, and Business Impact Estimates. A tally sheet was included for a simple start, if the rest took a bit longer. It's obvious the city's got a full plate with Hurricanes Helene and Milton—a lot to handle, naturally.

Florida Statute § 119.07(1)(c) points to a response within 10 business days as a general practice. From the 5th of February to the 17th, that time passed quietly. Now, on the 8th of March—30 days on—the tally sheet/cost estimate is still pending. Although there's a workshop planned for the 22nd of April, there are resulting gaps where the documentation could help ascertain the ordinance's need or purpose.

§ 166.041(4)(a), Business Impact Estimate— should include risk analyses, contingencies, with some evidence of commercial venue outreach. To no avail, on the city's website's the the terms —'impact estimate,' 'noise' were queried—though other BIEs are about. A fault is therefore worthy to note, and provided to the clerk was another copy of said tally sheet to complete within 7 business days from receipt of this notice —with perhaps a projected timeline referencing / indexing each Document Request (DR1-6) with cost estimate.

Otherwise it will be construed that the City of St. Pete Beach is in an *administrative default at common law (ADACL- please see Memoranda In Support of Affidavit sent previously)*, and without documentation to fulfill this §119 request which could demonstrate a compelling government interest and rational basis for said ordinance. Further administrative remedies could include mediation at the state level.

Constitutionally Yours,

Geoffrey Caputo,



CORRESPONDENCE:

Geoffrey Caputo

4604 49th St. N #140

St. Petersburg, FL 33709

floridarepublic@gmail.com

Attached: Tally Sheet for DR1-6

Notice to Principal is Notice to Agents and Notice to Agents is Notice to Principal

Adrian Petrila
Mayor, City of St. Pete Beach,
City Hall
155 Corey Avenue
St. Pete Beach, FL 33706
March 8, 2025
Cert # 7020 2450 0001 0277 5743

Notice of Fault / Follow-Up - Public Records Request Non-Compliance

Greetings Mayor Petrilla, (*Notice to Principal is Notice to Agents and Notice to Agents is Notice to Principal*);

A public records request reached the Clerk's chambers, City Hall on the 5th of February 2025 via USPS Certified Mail (Tracking Number: 7020 2450 0001 0300 9908), tied to Ordinance 2025-02's first reading—the noise ordinance. It covered Health Impact Studies, Community Feedback Records, Economic Impact Assessments, Legal Memos, Enforcement Records, and Business Impact Estimates. A tally sheet was included for a simple start, if the rest took a bit longer for Clerk LaRowe. It's obvious the city's got a full plate with Hurricanes Helene and Milton—a lot to handle, naturally.

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Otherwise it will be construed that the City of St. Pete Beach is in an *administrative default at common law (ADACL- please see Memoranda In Support of Affidavit sent previously)*, and without documentation to fulfill this §119 request which could demonstrate a compelling government interest and rational basis for said ordinance.. Further administrative remedies could include mediation at the state level.

Constitutionally Yours,
Geoffrey Caputo,



CORRESPONDENCE:

Geoffrey Caputo
4604 49th St. N #140
St. Petersburg, FL 33709
floridarepublic@gmail.com

cc: Karen Marriott Commissioner, District 1 / Lisa Robinson Commissioner, District 2 / Betty Rzewnicki Commissioner, District 3 / Joe Moholland Commissioner, District 4 / Ralf Brooks, Interim City Attorney

Karen Marriott
Commissioner, District 1
City Hall
155 Corey Avenue
St. Pete Beach, FL 33706
March 8, 2025
Cert # 7020 2450 0001 0277 5750

Notice of Fault / Follow-Up - Public Records Request Non-Compliance

Greetings Commissioner Marriot, (*Notice to Principal is Notice to Agents / Notice to Agents is Notice to Principal*);

A public records request reached the Clerk's chambers, City Hall on the 5th of February 2025 via USPS Certified Mail (Tracking Number: 7020 2450 0001 0300 9908), tied to Ordinance 2025-02's first reading—the noise ordinance. It covered Health Impact Studies, Community Feedback Records, Economic Impact Assessments, Legal Memos, Enforcement Records, and Business Impact Estimates. A tally sheet was included for a simple start, if the rest took a bit longer for Clerk LaRowe. It's obvious the city's got a full plate with Hurricanes Helene and Milton—a lot to handle, naturally.

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Constitutionally Yours,
Geoffrey Caputo,



CORRESPONDENCE:

Geoffrey Caputo
4604 49th St. N #140
St. Petersburg, FL 33709
floridarepublic@gmail.com

cc: Karen Marriott Commissioner, District 1 / Lisa Robinson Commissioner, District 2 / Betty Rzewnicki Commissioner, District 3 / Joe Moholland Commissioner, District 4 / Ralf Brooks, Interim City Attorney

Lisa Robinson
Commissioner, District 2
City Hall
155 Corey Avenue
St. Pete Beach, FL 33706
March 8, 2025
Cert # 7020 2450 0001 0277 5767

Notice of Fault / Follow-Up - Public Records Request Non-Compliance

Greetings Commissioner Robinson, (*Notice to Principal is Notice to Agents/Notice to Agents is Notice to Principal*);

A public records request reached the Clerk's chambers, City Hall on the 5th of February 2025 via USPS Certified Mail (Tracking Number: 7020 2450 0001 0300 9908), tied to Ordinance 2025-02's first reading—the noise ordinance. It covered Health Impact Studies, Community Feedback Records, Economic Impact Assessments, Legal Memos, Enforcement Records, and Business Impact Estimates. A tally sheet was included for a simple start, if the rest took a bit longer for Clerk LaRowe. It's obvious the city's got a full plate with Hurricanes Helene and Milton—a lot to handle, naturally.

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Constitutionally Yours,
Geoffrey Caputo,



CORRESPONDENCE:

Geoffrey Caputo
4604 49th St. N #140
St. Petersburg, FL 33709
floridarepublic@gmail.com

cc: Adrian Petrila, Mayor / Karen Marriott Commissioner, District 1 / Betty Rzewnicki Commissioner, District 3 / Joe Moholland Commissioner, District 4 / Ralf Brooks, Interim City Attorney

Betty Rzewnicki
Commissioner, District 3
City Hall
155 Corey Avenue
St. Pete Beach, FL 33706
March 8, 2025
Cert # 7020 2450 0001 0277 5774

Notice of Fault / Follow-Up - Public Records Request Non-Compliance

Greetings Commissioner Rzewnicki, (*Notice to Principal is Notice to Agents/Notice to Agents is Notice to Principal*);

A public records request reached the Clerk's chambers, City Hall on the 5th of February 2025 via USPS Certified Mail (Tracking Number: 7020 2450 0001 0300 9908), tied to Ordinance 2025-02's first reading—the noise ordinance. It covered Health Impact Studies, Community Feedback Records, Economic Impact Assessments, Legal Memos, Enforcement Records, and Business Impact Estimates. A tally sheet was included for a simple start, if the rest took a bit longer for Clerk LaRowe. It's obvious the city's got a full plate with Hurricanes Helene and Milton—a lot to handle, naturally.

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Constitutionally Yours,
Geoffrey Caputo,



CORRESPONDENCE:

Geoffrey Caputo
4604 49th St. N #140
St. Petersburg, FL 33709
floridarepublic@gmail.com

cc: Adrian Petrila, Mayor / Karen Marriott Commissioner, District 1 / Lisa Robinson Commissioner, District 2 / Joe Moholland Commissioner, District 4 / Ralf Brooks, Interim City Attorney

Joe Moholland
Commissioner, District 4
City Hall
155 Corey Avenue
St. Pete Beach, FL 33706
March 8, 2025
Cert # 7020 2450 0001 0277 5781

Notice of Fault / Follow-Up - Public Records Request Non-Compliance

Greetings Commissioner Moholland, (*Notice to Principal is Notice to Agents/Notice to Agents is Notice to Principal*);

A public records request reached the Clerk's chambers, City Hall on the 5th of February 2025 via USPS Certified Mail (Tracking Number: 7020 2450 0001 0300 9908), tied to Ordinance 2025-02's first reading—the noise ordinance. It covered Health Impact Studies, Community Feedback Records, Economic Impact Assessments, Legal Memos, Enforcement Records, and Business Impact Estimates. A tally sheet was included for a simple start, if the rest took a bit longer for Clerk LaRowe. It's obvious the city's got a full plate with Hurricanes Helene and Milton—a lot to handle, naturally.

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Constitutionally Yours,
Geoffrey Caputo,



CORRESPONDENCE:

Geoffrey Caputo
4604 49th St. N #140
St. Petersburg, FL 33709
floridarepublic@gmail.com

cc: Adrian Petrila, Mayor / Karen Marriott Commissioner, District 1 / Lisa Robinson Commissioner, District 2 / Betty Rzewnicki Commissioner, District 3 / Ralf Brooks, Interim City Attorney

Ralf Brooks
Interim City Attorney
City Hall
155 Corey Avenue
St. Pete Beach, FL 33706
March 8, 2025
Cert # 7020 2450 0001 0277 5798

Notice of Fault / Follow-Up - Public Records Request Non-Compliance

Greetings Counselor Brooks, *(Notice to Principal is Notice to Agents/Notice to Agents is Notice to Principal)*;

A public records request reached the Clerk's chambers, City Hall on the 5th of February 2025 via USPS Certified Mail (Tracking Number: 7020 2450 0001 0300 9908), tied to Ordinance 2025-02's first reading—the noise ordinance. It covered Health Impact Studies, Community Feedback Records, Economic Impact Assessments, Legal Memos, Enforcement Records, and Business Impact Estimates. A tally sheet was included for a simple start, if the rest took a bit longer for Clerk LaRowe. It's obvious the city's got a full plate with Hurricanes Helene and Milton—a lot to handle, naturally.

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Constitutionally Yours,
Geoffrey Caputo,



CORRESPONDENCE:

Geoffrey Caputo
4604 49th St. N #140
St. Petersburg, FL 33709
floridarepublic@gmail.com

cc: Adrian Petrila, Mayor / Karen Marriott Commissioner, District 1 / Lisa Robinson Commissioner, District 2 / Betty Rzewnicki Commissioner, District 3 / Joe Moholland Commissioner, District 4

City of St. Pete Beach, FL -
Records Request **PRR2025-22**
Completed Notification ➤ Inbox



JustFOIA Notificat... Mar 11
to me ▾



Hello,

The request [Request Number: PRR2025-22](#)
has been completed.

If you have any questions, please contact the
St. Pete Beach City Clerks office at
cityclerk@stpetebeach.org or call 727-363-
9201.

Thank you,

Amber LaRowe
City Clerk
City of St. Pete Beach
[155 Corey Avenue](#)
[St. Pete Beach, FL. 33706](#)
Phone: 727.363.9220
Fax: 727.541.8040

To: Amber LaRowe, City Clerk
City Hall, City Clerk's Office
155 Corey Avenue
St. Pete Beach, FL 33706
Date: March 13, 2025
USPS Cert. 9589 0710 5270 0028 5340 5340 41

THANK YOU LETTER FOR PARTIAL RESPONSE PER PRR2025-22

Dear City Clerk LaRowe, *(Notice to Principal is Notice to Agents / Notice to Agents is Notice to Principal)*

Thank you for your response to my public records request sent via email this past Tuesday (3/11/25), received by the city on February 5, 2025, via USPS Certified Mail (Tracking Number: 7020 2450 0001 0300 9908) and recorded as PRR2025-22. I appreciate the documents provided, including DR1, DR2, and DR5, and your note indicating that the request is "completed."

However, I must note that critical documents—specifically DR3 (Economic Impact Assessments), DR4 (Business Impact Estimates), and DR6 (Attorney Review Records)—were not included in PRR2025-22. Under Florida Statute § 119.07(1)(c), the city is required to provide a complete response to public records requests, and to expedite a 10-day response under Florida Law, I provided a template for a tally sheet of responsive documents, with a request to fill in with zeroes (0) - the documents which do not exist, even prior to a cost estimate. The absence of these documents raises concerns about the city's compliance with statutory obligations and the transparency of Ordinance 2025-02's development.

If this response is indeed deemed complete, I will construe that no additional documents exist to substantiate the ordinance's claims regarding health impacts, economic effects, or enforcement needs. This assumption is significant, as it suggests the city may lack evidence to support the ordinance's foundational assertions.

Accordingly, I remain on pace for the Administrative Default At Common Law (ADACL) deadline of March 18, 2025. Should the city want an extension till one week prior to the workshop date of April 22, please correspond and let me know. Should any new or additional documents become available before then, I have provided the tally table, in which I've included the documents that were produced. I would welcome any new document, should it come out of the pile per chance, to be included to ensure a full understanding of the ordinance's basis. Please return the completed table, even putting zeroes (0) in the blank spaces even if no documents turn up by the 18th of March, or if an extension is requested - by April 15, 2025.

Constitutionally Yours, 
Geoffrey Jacob Caputo

CORRESPONDENCE:

Geoffrey Caputo
4604 49th St. N #140
St. Petersburg, FL 33709
floridarepublic@gmail.com

Attached:

Partially Submitted Document Request Tally Table

DOCUMENT REQUEST TALLY						
	2021	2022	2023	2024	2025	CHECK-OFF
DR1: Health Impact Studies (HIS)						
a: Documentation or research cited by the City Commission to support health impact claims			Staff Report, Dec 2023) - Page 6 mentions noise mitigation but no studies.			Partial (2023) - No actual studies, just mitigation mention
b; Health Impact Data (local, regional)						
DR2: Community Feedback Records (CFR)						
Complaints, surveys, town hall minutes, public comments (last 3 years)			DR2.1 (Micklitsch, Sep 2023) - Slide 3: 11 complaints; Slide 5: resident quotes			Received (2023) - Complaints and comments from 2023 only
			DR2.2 (Hysell, Sep 2023) - Slide 3: complaints; Slide 6: quotes			
			DR2.3 (Letters, Dec 2023) - Pages 11-25: opposition letters			
			DR2.4 (Correspondence, Nov-Dec 2023) - Pages 2, 3, 5: opposition emails			
Feedback on quality of life, health, or property values			DR2.1 - Slide 5: sleep disruption DR2.2 - Slide 6: sleep, Slide 9: property values DR2.3 - Pages 12, 15, 19: peace/sleep DR2.4 - Pages 2, 5: peace/sleep			Received (2023) - Specific impacts noted
Digital records (emails, social media)			DR2.4 - Emails from Nov-Dec 2023			Received (2023) - Emails only

	2021	2022	2023	2024	2025	CHECK-OFF
DR3: Economic Impact Assessments (EIA)						
Studies linking noise to property value depreciation						
Historical Property Value Data (assessments, tax records)						
Appraisal Reports						
Comparative Sales Data						
Real Estate Market Analyses						
Noise Level Measurements (correlated with property values)						
Expert Testimonies or Opinions						
Public Feedback on Property Values			DR2.2 - Slide 9: property values mentioned (2023)			PARTIAL (2023) - ANECDOTAL MENTION, NO STUDY
Business Impact Studies (economic/ property value link)						
Zoning and Development Impact			DR1 - Zoning discussion (Dec 2023)			PARTIAL (2023) - ZONING CONTEXT, NO VALUE IMPACT
Academic/ Industry Research						
Mitigation Efforts (before/ after studies)			DR1 - Page 6: mitigation wall (Dec 2023)			PARTIAL (2023) - MITIGATION NOTED, NO VALUE STUDY
DR4: Legal Memos or Opinions (LMO)						
Legal analysis or correspondence						

	2021	2022	2023	2024	2025	CHECK-OFF
DR5: Enforcement Records (ER)						
Citations issued per year		DR5 - Noise surveys (2022-2023), no citation counts				PARTIAL (2022-2023) - NO SPECIFIC CITATION DATA
Locations of frequent violations		DR5 - 2007 Pag Way (2022-2023)				RECEIVED (2022-2023) - SPECIFIC LOCATION DATA
Outcomes of enforcement actions			DR5 - "Potential violation" (page 16, 2023), no outcomes			ARTIAL (2023) - NO RESOLUTION DETAILS
Reviews of enforcement effectiveness						
GIS mapping or visualizations						
DR6: Business Impact Estimates (BIE)						
Complete BIE under Florida Statute 166.041(4)						
Analyses/projections on business effects						
Business Impact Studies (economic/property value link)						
Data/models on revenue, traffic, costs						
Correspondence/meeting minutes						
Consultations with business organizations						

Adrian Petrila
Mayor, City of St. Pete Beach,
155 Corey Avenue
St. Pete Beach, FL 33706
Date: March 13, 2025
USPS Cert. 9589 0710 5270 0028 5340 58

THANK YOU LETTER FOR PARTIAL RESPONSE PER PRR2025-22

Greetings Mayor Petrilla, (*Notice to Principal is Notice to Agents / Notice to Agents is Notice to Principal*)

I thanked City Clerk LaRowe, for responding to my public records request recorded as PRR2025-22. I appreciated the documents provided, including DR1, DR2, and DR5, and the note indicating that the request is "completed." The provided documents (DR1, DR2.1-4, and DR5) center on primarily 2023 data regarding Red White & Booze and a single development project (Case No. 23034). This narrow focus suggests the ordinance may be an overreaction to a localized issue rather than a city-wide problem. If Red White & Booze is the primary concern, targeted measures could suffice without imposing city-wide regulations. This aligns with *City of Ladue v. Gilleo*, 512 U.S. 43 (1994), which emphasizes the need for narrowly tailored regulations to avoid overbreadth.

However, I must note that critical documents—specifically DR3 (Economic Impact Assessments), DR4 (Business Impact Estimates), and DR6 (Attorney Review Records)—were not included in PRR2025-22. The absence of these documents raises concerns about the city's compliance with statutory obligations and the transparency of Ordinance 2025-02's development.

If this response is indeed deemed complete, I will construe that no additional documents exist to substantiate the ordinance's claims regarding health impacts, economic effects, or enforcement needs. This assumption is significant, as it suggests the city may lack evidence to support the ordinance's foundational assertions.

Accordingly, I remain on pace for the Administrative Default At Common Law (ADACL) deadline of March 18, 2025. Should the city want an extension till one week prior to the workshop date of April 22, please correspond and let me know. Should any new or additional documents become available before then, I have provided the tally table to Madam Clerk, in which I've included the documents that were produced. I would welcome any new document, should it come out of the pile per chance, to be included to ensure a full understanding of the ordinance's basis. I've requested Madam Clerk to return the completed table, even putting zeroes (0) in the blank spaces even if no documents turn up by the 18th of March, or if an extension is requested - by April 15, 2025.

Constitutionally Yours,


Geoffrey Jacob Caputo

CORRESPONDENCE:

Geoffrey Caputo
4604 49th St. N #140
St. Petersburg, FL 33709
floridarepublic@gmail.com

cc: Karen Marriott Commissioner, District 1 / Lisa Robinson Commissioner, District 2 / Betty Rzewnicki Commissioner, District 3 / Joe Moholland Commissioner, District 4 / Ralf Brooks, Interim City Attorney

Karen Marriott
Commissioner, District 1
155 Corey Avenue
St. Pete Beach, FL 33706
Date: March 13, 2025
USPS Cert. 9589 0710 5270 0028 5340 65

THANK YOU LETTER FOR PARTIAL RESPONSE PER PRR2025-22


Greetings Commissioner Marriot (*Notice to Principal is Notice to Agents / Notice to Agents is Notice to Principal*),

I thanked City Clerk LaRowe, for responding to my public records request recorded as PRR2025-22. I appreciated the documents provided, including DR1, DR2, and DR5, and the note indicating that the request is "completed." The provided documents (DR1, DR2.1-4, and DR5) center on primarily 2023 data regarding Red White & Booze and a single development project (Case No. 23034). This narrow focus suggests the ordinance may be an overreaction to a localized issue rather than a city-wide problem. If Red White & Booze is the primary concern, targeted measures could suffice without imposing city-wide regulations. This aligns with *City of Ladue v. Gilleo*, 512 U.S. 43 (1994), which emphasizes the need for narrowly tailored regulations to avoid overbreadth.

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Constitutionally Yours, 
Geoffrey Jacob Caputo

CORRESPONDENCE:

Geoffrey Caputo
4604 49th St. N #140
St. Petersburg, FL 33709
floridarepublic@gmail.com

cc: Adrian Petrila, Mayor / Lisa Robinson Commissioner, District 2 / Betty Rzewnicki Commissioner, District 3 / Joe Moholland Commissioner, District 4 / Ralf Brooks, Interim City Attorney

Lisa Robinson
Commissioner, District 2
155 Corey Avenue
St. Pete Beach, FL 33706
Date: March 13, 2025
USPS Cert. 9589 0710 5270 0028 5340 72

THANK YOU LETTER FOR PARTIAL RESPONSE PER PRR2025-22

Greetings Commissioner Robinson, (*Notice to Principal is Notice to Agents/Notice to Agents is Notice to Principal*);

I thanked City Clerk LaRowe, for responding to my public records request recorded as PRR2025-22. I appreciated the documents provided, including DR1, DR2, and DR5, and the note indicating that the request is "completed." The provided documents (DR1, DR2.1-4, and DR5) center on primarily 2023 data regarding Red White & Booze and a single development project (Case No. 23034). This narrow focus suggests the ordinance may be an overreaction to a localized issue rather than a city-wide problem. If Red White & Booze is the primary concern, targeted measures could suffice without imposing city-wide regulations. This aligns with *City of Ladue v. Gilleo*, 512 U.S. 43 (1994), which emphasizes the need for narrowly tailored regulations to avoid overbreadth.

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Constitutionally Yours,


Geoffrey Jacob Caputo

CORRESPONDENCE:

Geoffrey Caputo
4604 49th St. N #140
St. Petersburg, FL 33709
floridarepublic@gmail.com

cc: Adrian Petrila, Mayor / Karen Marriott Commissioner, District 1 / Betty Rzewnicki Commissioner, District 3 / Joe Moholland Commissioner, District 4 / Ralf Brooks, Interim City Attorney

Betty Rzewnicki
Commissioner, District 3
155 Corey Avenue
St. Pete Beach, FL 33706
Date: March 13, 2025
USPS Cert. 9589 0710 5270 0028 5340 89

THANK YOU LETTER FOR PARTIAL RESPONSE PER PRR2025-22

Greetings Commissioner Rzewnicki,

I thanked City Clerk LaRowe, for responding to my public records request recorded as PRR2025-22. I appreciated the documents provided, including DR1, DR2, and DR5, and the note indicating that the request is "completed." The provided documents (DR1, DR2.1-4, and DR5) center on primarily 2023 data regarding Red White & Booze and a single development project (Case No. 23034). This narrow focus suggests the ordinance may be an overreaction to a localized issue rather than a city-wide problem. If Red White & Booze is the primary concern, targeted measures could suffice without imposing city-wide regulations. This aligns with *City of Ladue v. Gilleo*, 512 U.S. 43 (1994), which emphasizes the need for narrowly tailored regulations to avoid overbreadth.

However, I must note that critical documents—specifically DR3 (Economic Impact Assessments), DR4 (Business Impact Estimates), and DR6 (Attorney Review Records)—were not included in PRR2025-22. The absence of these documents raises concerns about the city's compliance with statutory obligations and the transparency of Ordinance 2025-02's development.

If this response is indeed deemed complete, I will construe that no additional documents exist to substantiate the ordinance's claims regarding health impacts, economic effects, or enforcement needs. This assumption is significant, as it suggests the city may lack evidence to support the ordinance's foundational assertions.

Accordingly, I remain on pace for the Administrative Default At Common Law (ADACL) deadline of March 18, 2025. Should the city want an extension till one week prior to the workshop date of April 22, I've requested of the Mayor and Madam Clerk to please correspond and let me know. Should any new or additional documents become available before then, I have provided the tally table to Madam Clerk, in which I've included the documents that were produced. I would welcome any new document, should it come out of the pile per chance, to be included to ensure a full understanding of the ordinance's basis. I've requested Madam Clerk to return the completed table, even putting zeroes (0) in the blank spaces even if no documents turn up by the 18th of March, or if an extension is requested - by April 15, 2025.

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Geoffrey Jacob Caputo

CORRESPONDENCE:

Geoffrey Caputo
4604 49th St. N #140
St. Petersburg, FL 33709
floridarepublic@gmail.com

Joe Moholland
Commissioner, District 4
155 Corey Avenue
St. Pete Beach, FL 33706
Date: March 13, 2025
USPS Cert. 9589 0710 5270 0028 5340 96

THANK YOU LETTER FOR PARTIAL RESPONSE PER PRR2025-22

Greetings Commissioner Moholland, *(Notice to Principal is Notice to Agents/Notice to Agents is Notice to Principal)*;

I thanked City Clerk LaRowe, for responding to my public records request recorded as PRR2025-22. I appreciated the documents provided, including DR1, DR2, and DR5, and the note indicating that the request is "completed." The provided documents (DR1, DR2.1-4, and DR5) center on primarily 2023 data regarding Red White & Booze and a single development project (Case No. 23034). This narrow focus suggests the ordinance may be an overreaction to a localized issue rather than a city-wide problem. If Red White & Booze is the primary concern, targeted measures could suffice without imposing city-wide regulations. This aligns with *City of Ladue v. Gilleo*, 512 U.S. 43 (1994), which emphasizes the need for narrowly tailored regulations to avoid overbreadth.

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Constitutionally Yours,


Geoffrey Jacob Caputo

CORRESPONDENCE:

Geoffrey Caputo
4604 49th St. N #140
St. Petersburg, FL 33709
floridarepublic@gmail.com

cc: Adrian Petrila, Mayor / Karen Marriott Commissioner, District 1 / Lisa Robinson Commissioner, District 2 / Betty Rzewnicki Commissioner, District 3 / Ralf Brooks, Interim City Attorney

J Ralf Brooks, Esq.
Interim City Attorney
155 Corey Avenue
St. Pete Beach, FL 33706
Date: March 13, 2025
USPS Cert. 9589 0710 5270 0028 53401 02

THANK YOU LETTER FOR PARTIAL RESPONSE PER PRR2025-22

Greetings Counselor Brooks, (*Notice to Principal is Notice to Agents/Notice to Agents is Notice to Principal*);

I thanked City Clerk LaRowe, for responding to my public records request recorded as PRR2025-22. I appreciated the documents provided, including DR1, DR2, and DR5, and the note indicating that the request is "completed." The provided documents (DR1, DR2.1-4, and DR5) center on primarily 2023 data regarding Red White & Booze and a single development project (Case No. 23034). This narrow focus suggests the ordinance may be an overreaction to a localized issue rather than a city-wide problem. If Red White & Booze is the primary concern, targeted measures could suffice without imposing city-wide regulations. This aligns with *City of Ladue v. Gilleo*, 512 U.S. 43 (1994), which emphasizes the need for narrowly tailored regulations to avoid overbreadth.

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Constitutionally Yours, 
Geoffrey Jacob Caputo

CORRESPONDENCE:

Geoffrey Caputo
4604 49th St. N #140
St. Petersburg, FL 33709
floridarepublic@gmail.com

cc: Adrian Petrila, Mayor / Karen Marriott Commissioner, District 1 / Lisa Robinson Commissioner, District 2 / Betty Rzewnicki Commissioner, District 3 / Joe Moholland Commissioner, District 4

Notice of Administrative Default at Common Law - PRR2025-22

Amber LaRowe
City Clerk
155 Corey Avenue
St. Pete Beach, FL 33706
March 28, 2025

USPS Cert: 7020 2450 0001 0277 5804

CORRESPONDENCE:

Geoffrey Caputo
4604 49TH ST. N #140
Kenneth City, FL 33709
floridarepublic@gmail.com

Dear City Clerk LaRowe, (*Notice To Principle Is Notice To Agent/Notice To Agent Is Notice To Principle*):

This letter accompanies the enclosed *Notice of Administrative Default at Common Law (ADACL)* regarding the City of St. Pete Beach's response to *Public Records Request PRR2025-22*.

The purpose of this communication is to formally document the City's default in fully responding to the aforementioned request. Despite the initial *Notice of Fault* and subsequent communications, the City's partial response and failure to address noted deficiencies, including the **refusal to complete the tally sheet with zeros or exemptions**, constitute *tacit acquiescence to the non-existence* or inadequacy of critical documents supporting *Ordinance 2025-05*. This is grounded in the legal principle of *qui tacet consentire videtur*.

It is hereby requested that the City of St. Pete Beach address the deficiencies outlined in the attached documents promptly before the April 22 workshop or suspend any activity on *Ordinance 2025-05* pending documentation supporting the reasons given on page 220 in the *01282025 CC Agenda Packet* which could rationalize its enactment.

Attached is the tally sheet with the documents from *PRR2025-22*, as they stand. If the tradition of transparency St. Pete Beach is known for holds, filling in exemptions (*Fl. Stat. Ch. 119.07(1)(c,d,f)*) or zeroes for records not in custody or control could be a great step forward. Sending it via email or USPS would keep the spirit of openness.

Constitutionally Yours,



Geoffrey Jacob Caputo, 03/28/2025
{*Administrative Processor At Common Law*} -
- *Florida*

Attachments:

1. Findings of Fact in Administrative Record (FFAR)
2. Conclusions At Law Of Administrative Record (CLAR)
3. Memoranda of Law In Support of ADACL
4. Tally Table of *Partially Fulfilled DR1-6*

cc: Mayor Petrilla, Karen Marriott, District 1 / Lisa Robinson, District 2 / Betty Rzewnicki, District 3 / Joe Moholland District 4 / Ralf Brooks, Interim City Attorney

Notice of Administrative Default at Common Law - PRR2025-22

Adrian Petrila
Mayor, St. Pete Beach,
City Hall
155 Corey Avenue
St. Pete Beach, FL 33706
March 28, 2025

USPS Cert: 7020 2450 0001 0277 5811

CORRESPONDENCE:

Geoffrey Caputo
4604 49TH ST. N #140
Kenneth City, FL 33709
floridarepublic@gmail.com

Servus Mayor Petrilla, (*Notice To Principle Is Notice To Agent/Notice To Agent Is Notice To Principle*):

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{Administrative Processor At Common Law} -
- Florida

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cc: Karen Marriott Commissioner, District 1 / Lisa Robinson Commissioner, District 2 / Betty Rzewnicki Commissioner, District 3 / Joe Moholland Commissioner, District 4 / Ralf Brooks, Interim City Attorney

Notice of Administrative Default at Common Law - PRR2025-22

Karen Marriott
Commissioner, District 1
City Hall
155 Corey Avenue
St. Pete Beach, FL 33706

March 28, 2025

USPS CERT: 7020 2450 0001 0277 5828

CORRESPONDENCE:

Geoffrey Caputo
4604 49TH ST. N #140
Kenneth City, FL 33709
floridarepublic@gmail.com

Greetings Commissioner Marriot, (*Notice To Principle Is Notice To Agent/Notice To Agent Is Notice To Principle*):

This letter accompanies the enclosed *Notice of Administrative Default at Common Law (ADACL)* regarding the City of St. Pete Beach's response to *Public Records Request PRR2025-22*.

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{Administrative Processor At Common Law} -
- Florida

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cc: Mayor Petrilla ; Lisa Robinson Commiss.D2 ; Betty Rzewnicki Commiss. D3
Joe Moholland Commiss. D4 ; Ralf Brooks, Interim City Attorney

Notice of Administrative Default at Common Law - PRR2025-22

Lisa Robinson
Commissioner, District 2
City Hall
155 Corey Avenue
St. Pete Beach, FL 33706

March 28, 2025

USPS CERT: 7020 2450 0001 0301 7743

CORRESPONDENCE:

Geoffrey Caputo
4604 49TH ST. N #140
Kenneth City, FL 33709
floridarepublic@gmail.com

Greetings Commiss. Robinson (*Notice To Principle Is Notice To Agent/Notice To Agent Is Notice To Principle*):

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Geoffrey Jacob Caputo, 03/28/2025
{*Administrative Processor At Common Law*} -
- Florida

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cc: Mayor Petrilla ; Karen Marriott Commiss.D1 / Betty Rzewnicki Commiss. D3 /
Joe Moholland Commiss.D4 / Ralf Brooks, Interim City Attorney

Notice of Administrative Default at Common Law - PRR2025-22

Betty Rzewnicki
Commissioner, District 3
City Hall
155 Corey Avenue
St. Pete Beach, FL 33706

March 28, 2025

USPS CERT: 7020 2450 0001 0277 5019

CORRESPONDENCE:

Geoffrey Caputo
4604 49TH ST. N #140
Kenneth City, FL 33709
floridarepublic@gmail.com

Greetings Commissioner Rzewnicki, (*Notice To Principle Is Notice To Agent/Notice To Agent Is Notice To Principle*):

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Geoffrey Jacob Caputo, 03/28/2025

{Administrative Processor At Common Law} -

- Florida

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cc: Adrian Petrila, Mayor / Karen Marriott Commissioner, District 1 / Lisa Robinson Commissioner, District 2
Joe Moholland Commissioner, District 4 / Ralf Brooks, Interim City Attorney

Notice of Administrative Default at Common Law - PRR2025-22

Joe Moholland
Commissioner, District 4
City Hall
155 Corey Avenue
St. Pete Beach, FL 33706
March 28, 2025

USPS CERT: 7020 2450 0001 0277 5026

CORRESPONDENCE:

Geoffrey Caputo
4604 49TH ST. N #140
Kenneth City, FL 33709
floridarepublic@gmail.com

Greetings Commissioner Moholland, (*Notice To Principle Is Notice To Agent/Notice To Agent Is Notice To Principle*):

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Geoffrey Jacob Caputo, 03/28/2025
{Administrative Processor At Common Law} -
- Florida

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4. Tally Table of *Partially Fulfilled DR1-6*

cc: Adrian Petrila, Mayor / Karen Marriott Commissioner, District 1 / Lisa Robinson Commissioner, District 2 /
Betty Rzewnicki Commissioner, District 3 / Ralf Brooks, Interim City Attorney

Notice of Administrative Default at Common Law - PRR2025-22

Ralf Brooks
Interim City Attorney
City Hall
155 Corey Avenue
St. Pete Beach, FL 33706

March 28, 2025

USPS CERT: 7020 2450 0001 0277 5033

CORRESPONDENCE:

Geoffrey Caputo
4604 49TH ST. N #140
Kenneth City, FL 33709
floridarepublic@gmail.com

Greetings Counselor Brooks, (*Notice To Principle Is Notice To Agent/Notice To Agent Is Notice To Principle*):

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cc: Adrian Petrila, Mayor / Karen Marriott Commissioner, District 1 / Lisa Robinson Commissioner, District 2 / Betty Rzewnicki Commissioner, District 3 / Joe Moholland Commissioner, District 4

I. FINDINGS OF FACT IN ADMINISTRATIVE RECORD

State of Florida)
County of Pinellas)

(1) Introduction

This document outlines the findings of fact related to *Public Records Request PRR2025-22*, submitted to the City of St. Pete Beach.

(a) Factual Background

- (i) Request Submission:** On February 2, 2025, I submitted *PRR2025-22* via USPS Certified Mail (Tracking #70202450000103009908), “*USPS#___*”, herein), received February 5, requesting six document categories (*DR1-DR6*) related to *Ordinance 2025-02* and a tally sheet to indicate document existence **or non-existence** by category and year (2021-2025).
- (ii) Notice of Fault:** On March 8, 2025, I issued a *Notice of Fault* via *USPS #7020 2450 0001 0277 5118*, alleging non-compliance after a 30-day lapse (February 5 to March 7), demanding tally sheet by March 15. This preceded any city response.
- (iii) Partial Response:** On *March 15, 2025*, the city provided a partial response via JustFOIA, emailed by Amber LaRowe, addressing *DR1, DR2, DR5 (all partially)*, omitting *DR3, DR4, DR6*, and tally sheet—*post-Fault*, showing delay.
- (iv) Thank You Letter (Quasi-Second Notice):** On *March 13, 2025*, I sent a *Thank You Letter* via *USPS #95890710527000285340534041*, acknowledging the forthcoming partial response (received March 15), noting *deficiencies in DR1, DR2, DR5's scope*, and the *absence of DR3, DR4, DR6*, setting *March 18 or April 15 deadlines*.
- (v) Non-Compliance and Document-Specific Issues:** As of March 25, 2025, the city has not fully responded, omitting *DR3, DR4, DR6* entirely, partially fulfilling *DR1, DR2, DR5* with inadequate scope, and failing to mark non-existent documents with zeros, despite the city-wide claims made in the 01282025CC Agenda Packet.

The Mayor and Commissioners have been copied throughout the entire process detailed above, and the USPS Cert. # are available on request.

Details And Implications As Follows:

(2) Document-Specific Findings

(a) DR1: Health Impact Studies (HIS)

- (i) Requested:** Documentation or research supporting noise-related health claims, including local epidemiological data (e.g., from FDOH).
- (ii) Partially Fulfilled:** December 2023 Staff Presentation mentions noise mitigation, focused solely on Red, White & Booze (RWB) and another case (per clerk's March 15 response).
- (iii) Unfulfilled:** No Florida CHARTS data (<https://www.flhealthcharts.gov/>) or FDOH epidemiological investigation for city-wide trends in noise-induced conditions (e.g., hearing impairment, hypertension), as noted in my *Thank You Letter*.
- (iv) Implication:** RWB-centric 2023 data doesn't reflect a city-wide health crisis, undermining the agenda's broad health claims under Fla. Stat. § 381.0031.
- (v) Adverse Inference for Lack of Documentation:** The city's failure to provide city-wide health data suggests no such trend exists or would contradict their claims (*Public Health Trust of Dade County V. Valcin*, 507 So. 2d 596, Fla. 1987).

(b) DR2: Community Feedback Records (CFR)

- (i) Requested:** Complaints, surveys, town hall minutes, public comments (2021-2025), feedback on quality of life, health, or property values, including digital records.
- (ii) Partially Fulfilled:** Correspondence and letters from 2023, primarily RWB complaints (per clerk's March 15 PDF upload).
- (iii) Unfulfilled:** No feedback from 2021, 2022, 2024, or 2025; no surveys, town hall minutes, or city-wide comments beyond RWB; no digital records outside 2023, as flagged in my *Thank You Letter*.
- (iv) Implication:** 2023 RWB-focused letters can't demonstrate a city-wide consensus or trend justifying Ordinance 2025-05's scope.
- (v) Adverse Inference:** The absence of multi-year, city-wide feedback infers no broad community support or need exists (*Public Health Trust V. Valcin*, 507 So. 2d 596, Fla. 1987).

VERIFIED Notice of Administrative Default at Common Law - PRR2025-22

(c) DR3: Economic Impact Assessments (EIA)

(i) **Requested:** Studies linking noise to property value depreciation, including historical sales data and noise measurements.¹

(ii) **Unfulfilled:** No studies provided (per March 15 response and Thank You Letter).

(iii) **Implication:** Without hedonic models, the agenda's "declining property values" claim lacks factual basis.

CONDITION	ICD-10-CM CODES	TRACKED IN CHARTS?
<i>Hearing Impairment</i>	H90.3, H91.90, H83.3	Yes (disability/hospital data)
<i>Hypertension</i>	I10, I11.9, I11.0	Yes (chronic disease stats)
<i>Ischemic Heart Disease</i>	I25.10, I25.110	Yes (mortality/morbidity)
<i>Sleep Disturbance</i>	G47.9, G47.00, F51.9	Yes (indirect via mental health)
<i>Annoyance</i>	None (R45.1 proxy)	No
<i>Decreased School Performance</i>	None (F81.9 proxy)	No (education data instead)

¹ **Investopedia** – "Hedonic Pricing" (<https://www.investopedia.com/terms/h/hedonicpricing.asp>): Property prices bundle internal (e.g., size) and external factors (e.g., noise). Hedonic regression quantifies noise's specific value decrease (e.g., % per decibel), unlike raw averages that mask causality.

Corporate Finance Institute – "Hedonic Regression Method" (<https://corporatefinanceinstitute.com/resources/economics/hedonic-regression-method/>): Real estate's complex attributes demand regression to estimate noise's "hedonic price," offering precision basic metrics can't.

Review of Environmental Economics and Policy – Bishop et al. (2020) (<https://www.journals.uchicago.edu/doi/10.1093/reep/reaa001>): Hedonic models are the "premier approach" for valuing noise's impact, controlling spatial and housing variables to isolate marginal losses—simple methods fail this test.

UK Office for National Statistics – "Hedonic Pricing Method Note" (<https://www.ons.gov.uk/economy/environmentalaccounts/methodologies/valueofnatureimplicitinpropertypriceshedonicpricingmethodhp>): Raw data can't unbundle noise effects; hedonic regression's 80%+ R-squared proves its necessity for credible disamenity analysis.

ScienceDirect – Taylor, L.O. (2018) (<https://www.sciencedirect.com/science/article/abs/pii/S157400991830018X>): Hedonic models dominate environmental valuation, using sales data to pinpoint noise-driven declines—census aggregates lack this rigor.

CoreLogic Australia – "Home Value Index" (<https://www.corelogic.com.au/our-data/corelogic-indices>): Hedonic indices avoid compositional bias of repeat sales, modeling all properties to track noise-related value drops accurately.

Complexity: Noise's impact on property values is tangled with location, size, and amenities—hedonic models untangle it via regression, per Investopedia and Taylor.

Isolation: Simple averages or median sales (e.g., Pinellas County data) can't isolate noise's effect; hedonic regression pinpoints its marginal cost, per CFI and Bishop et al.

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(iv) **Adverse Inference:** The city's failure to produce hedonic model analyses in DR3 means the purported "declining property values" claim is unsubstantiated conjecture, not fact.

(d) DR4: Legal Memos or Opinions (LMO)

- (i) **Requested:** Legal analysis or correspondence supporting the ordinance.
- (ii) **Partially Fulfilled:** A memorandum of law from the *January 28, 2025*, agenda packet regarding the *Catalano* case (per prior input, assumed in clerk's response).
- (iii) **Unfulfilled:** No additional legal memos or analyses beyond the Catalano-specific document addressing Ordinance 2025-02's city-wide scope, First Amendment, or compliance with state law, as noted in my Thank You Letter.
- (iv) **Implication:** A single case memo doesn't substantiate the ordinance's broader legal foundation, leaving its city-wide application and constitutional risks unaddressed.
- (v) **Adverse Inference:** The lack of comprehensive legal analysis beyond Catalano infers no robust defense exists for Ordinance 2025-02's scope or would expose vulnerabilities (Valcin, Id.).

(e) DR5: Enforcement Records (ER)

- (i) **Requested:** Citations issued per year (2021-2025), locations of frequent violations, outcomes, effectiveness reviews.
- (ii) **Partially Fulfilled:** May-July 2023 noise surveys (decibel readings) tied to RWB, and 2007 measurements (per clerk's March 15 response).
- (iii) **Unfulfilled:** No citation counts, city-wide violation locations, outcomes, or effectiveness reviews (2021-2025), as noted in my Thank You Letter.
- (iv) **Implication:** RWB-focused 2023 and 2007 data—18 years stale—don't reflect a current, city-wide enforcement need.
- (v) **Adverse Inference:** Failure to show city-wide enforcement data suggests no pervasive issue exists (Valcin, Id.).

(f) DR6: Business Impact Estimates (BIE)

(i) Requested: Compliance with Fla. Stat. § 166.041(4)(a) Business Impact Estimate ² for Ordinance 2025-05.

(ii) Unfulfilled: The city disregarded § 166.041(4)(a)'s mandates and global norms ³, leaving venue impacts and enforcement costs unquantified, untested, and opaque.

(A) Evidence: Even if there was a BIE, there must be a Public Purpose (§ 166.041(4)(a)): GAO (Ch. 4, p. 38) There is no economic impact statement tying Ordinance 2025-05 to noise control goals.

(B) No Business Count (§ 166.041(4)(a)1): GAO (Ch. 9, p. 90), Circular A-4 (Ch. 7, p. 27), and RFA Guide (Ch. 1, p. 15) demand data-driven counts, segmented by entity type (e.g., bars vs. music venues). The city didn't estimate or categorize affected venues.

(C) No Economic Impact (§ 166.041(4)(a)2): GAO (Ch. 3, p. 31), Circular A-4 (Ch. 2, p. 5), and RFA Guide (Appendix M, p. 201) require quantified revenue losses (e.g., gigs canceled) and achievability tests (e.g., costs >10% sales = "Stress"). There must be a BIE reflecting this.

(D) No Compliance Costs (§ 166.041(4)(a)3): GAO (Ch. 10, p. 100), Circular A-4 (Ch. 7, p. 27), and RFA Guide (Ch. 2, p. 37) mandate cost estimates (e.g., \$10k–\$50k soundproofing) and alternatives to minimize burden (e.g., waivers).

² Fla. Stat. § 166.041(4)(a) mandates a BIE with six elements: public purpose (§ 166.041(4)(a)), number of businesses impacted (§ 166.041(4)(a)1), direct economic impact (§ 166.041(4)(a)2), compliance costs (§ 166.041(4)(a)3), new fees (§ 166.041(4)(a)4), and municipal costs (§ 166.041(4)(a)5).

• GAO-20-195G, Circular A-4, OECD, and the RFA Guide set global standards—structured estimates, stakeholder input, risk analysis, entity segmentation, and alternatives—which the city must meet for a "good faith" BIE. It didn't.

³ OMB circular A-4 : <https://whitehouse.gov/wp-content/uploads/2023/11/CircularA-4.pdf>

• GAO-20-195G Cost Estimating and Assessment Guide <https://www.gao.gov/assets/gao-20-195g.pdf>

• Regulatory Impact Analysis - OECD https://www.oecd.org/en/publications/regulatory-impact-analysis_9789264162150-en.html

• U.S. Small Business Administration, A GUIDE FOR GOVERNMENT AGENCIES How to Comply with the Regulatory Flexibility Act , August 2017 : <https://advocacy.sba.gov/wp-content/uploads/2019/07/How-to-Comply-with-the-RFA-WEB.pdf>

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(E) No Fee Details (§ 166.041(4)(a)4): GAO (Ch. 7, p. 60) and Circular A-4 (Ch. 7, p. 27) require fee breakdowns (e.g., fines). There must be a BIE reflecting this.

(F) No Municipal Costs (§ 166.041(4)(a)5): GAO (Ch. 10, p. 100) and Circular A-4 (Ch. 7, p. 27) demand enforcement cost estimates. Nothing from the city.

(G) No Stakeholder Input: OECD (Ch. 9, p. 9), Circular A-4 (Ch. 1, p. 4), and RFA Guide (Ch. 1, p. 19; Ch. 4, p. 51) require venue feedback via outreach as a matter of both globally and generally accepted principle (e.g., SBREFA panels). The city ignored them.

(H) No Risk Analysis: As a matter of both globally and generally accepted principle, GAO (Ch. 12, p. 139), Circular A-4 (Ch. 11, p. 74), and RFA Guide (Ch. 1, p. 11) mandate uncertainty modeling (e.g., fine frequency) and threshold analysis for impact significance. There must be a BIE reflecting this.

(I) No Documentation: GAO (Ch. 13, p. 167), Circular A-4 (Ch. 13, p. 82), and RFA Guide (Ch. 1, p. 13) insist on transparency with a “factual basis.” The city’s non-existent data to support a responsibly calculated BIE so as to avoid incurring economic harms is concerning.

(J) Implication: The city disregarded § 166.041(4)(a)’s mandates and global norms—GAO’s structure (Ch. 3, p. 31), Circular A-4’s rigor (Ch. 2, p. 5), OECD’s consultation (Ch. 9, p. 9), and RFA Guide’s entity focus (Ch. 1, p. 15) and alternatives (Ch. 2, p. 37)—leaving venue impacts (revenue, retrofits, culture) and enforcement costs unquantified, untested, and opaque.

(iii) Adverse Inference: By dodging these standards, the city infers it’s hiding Ordinance 2025-05’s crippling toll on venues—evidenced by no segmentation (RFA Ch. 1, p. 15), no achievability analysis (Appendix M, p. 201), and no alternatives (Ch. 2, p. 37)—gutting the BIE’s purpose with an unsubstantiated justification for this ordinance

2025-22

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(3) DEFAULT CLAUSE:

All of the foregoing and ensuing premise of *qui tacet consentire videtur* and *The Administrative Default At Common Law* shall apply to this sworn *Finding of Fact In Administrative Record*.


(4) SEVERABILITY:

In the event any part of (1) or (2) is held to be invalid for any reason, or any interpretation or reference of any kind stated do not apply; or is misquoted, misinterpreted; then the application of only the part that is proven incorrect shall be invalidated and the remaining parts, the application of sources so stated, shall not be affected but shall remain in full force and shall be taken as factual including Exhibits, Memorandums whatever- from this and all previously submitted documents, etc., by the Undersigned.

Constitutionally yours, , Geoffrey Jacob Caputo

JURAT:

Sworn to (or affirmed) and subscribed before me by means of physical presence this 28th day of March, 2025, by Geoffrey Jacob Caputo, identified by Florida Drivers License C-130-290-70-305-0.

(Signature of Notary Public - State of Florida) 

(Print, Type, or Stamp Commissioned Name of Notary Public)



Deshaun Holloway
Comm.: HH 614469
Expires: Nov. 20, 2028
Notary Public - State of Florida

I attest that the preceding or attached document is a true and exact complete, and unaltered Photocopy made by me of Verified Notice of Administrative Default at common law presented to me by the document custodian Geoffrey Jacob Caputo and to the best of my knowledge that the photocopied document is neither a vital record nor a public record certified copies of which are available from an official source other than a notary public.





Deshaun Holloway
Comm.: HH 614469
Expires: Nov. 20, 2028
Notary Public - State of Florida

II. CONCLUSIONS AT LAW OF ADMINISTRATIVE RECORD

The City of St. Pete Beach's failure to fully respond to public records request PRR2025-22 establishes an administrative default under common law principles, demonstrating both statutory violations and substantive inadequacies that undermine Ordinance 2025-05's legitimacy.

A. Legal Framework

1. Statutory Obligations

Florida's Public Records Act imposes explicit obligations on government agencies:

a. Fla. Stat. § 119.07(1)(a) mandates that agencies permit inspection and copying of records "at any reasonable time, under reasonable conditions." While this provides flexibility, it does not authorize indefinite delay or selective response.

b. Fla. Stat. § 119.07(1)(d) requires custodians to redact exempt portions but provide the remainder, not withhold entire categories of documents.

c. Fla. Stat. § 119.07(1)(e) demands citation of statutory exemptions when withholding records, which the city did not provide for DR3, DR4, and DR6.

d. Fla. Stat. § 166.041(4)(a) requires municipalities to prepare Business Impact Estimates with specific elements before adopting certain ordinances, including public purpose statements and economic impact analysis—documentation the city failed to produce.

2. Common Law Principles

a. Fla. Stat. § 2.01 incorporates English common law of general nature, including maxims like *qui tacet consentire videtur* ("he who is silent appears to consent"), when not inconsistent with statutory law.

b. The Florida Supreme Court in *State v. Ashley* confirmed that common law principles persist unless expressly abrogated by statute—Chapter 119 creates no barrier to applying common law defaults for non-responsive agencies.

c. *Vacation Ventures v. Holiday Promotions* establishes that silence can shift the burden of proof, creating evidentiary consequences for non-responsive parties—a principle directly applicable to the city's selective silence.

B. Analysis of Non-Compliance

1. Procedural Violations

a. The city's failure to respond for over 30 days (February 5 to March 8) violates the "reasonable time" standard under *Fla. Stat. § 119.07(1)(a)* and *Tribune Co. v. Cannella*, which prohibits automatic delays interfering with prompt access.

b. Even after the *Notice of Fault*, the city's partial response provided on *March 15* failed to address three entire document categories (DR3, DR4, DR6), constituting ongoing non-compliance under *Consumer Rights, LLC v. Bradford County*, which demands good faith responses.

c. The city's failure to provide the requested tally sheet marking non-existent documents with zeros violates *Fla. Stat. § 119.07(1)(c)*'s *good faith* requirement by obscuring whether documents exist or are being improperly withheld.

2. Substantive Inadequacies

a. DR1 (Health Impact Studies): The city provided only RWB-focused 2023 data, not the city-wide health trends claimed in the agenda. Under *Public Health Trust v. Valcin*, this selective disclosure permits an adverse inference that no broader health crisis exists.

b. DR2 (Community Feedback): Only 2023 RWB complaints were provided, not multi-year or city-wide feedback, allowing an inference under *Valcin* that no broad community consensus exists.

c. DR3 (Economic Impact Assessments): Complete non-production of hedonic studies permits an inference that no data supports claimed property value decreases.

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d. DR4 (Legal Memos): The singular Catalano memo fails to address city-wide application or constitutional concerns, suggesting no robust legal foundation exists.

e. DR5 (Enforcement Records): Limited RWB and outdated 2007 data cannot substantiate a current, city-wide enforcement need.

f. DR6 (Business Impact Estimates): The absence of any BIE documentation violates Fla. Stat. § 166.041(4)(a) and suggests the city is concealing the ordinance's potential for economic harm to venues.

C. Administrative Default Established

1. Default Mechanism

a. The Administrative Default at Common Law process is founded on parallel principles to other administrative defaults in Florida law, such as Fla. Admin. Code R. 28-106.111(4), which treats non-response as waiver, and tax assessment defaults under Fla. Admin. Code R. 12-6.003(3), which finalize matters when parties fail to respond.

b. Under *Elliott v. Aurora Loan Servs.*, un rebutted affidavits establish facts for the affiant—here, the verified notice details the city's non-compliance, creating a record the city has not contested.

c. The common law maxim *qui tacet consentire videtur*, applied in modern contexts through cases like *Vacation Ventures*, operates to treat the city's silence on key documents as *tacit acquiescence* that such documents either do not exist or would contradict their claims.

2. Consequences of Default

a. The city's non-response to DR3, DR4, and DR6, and inadequate response to DR1, DR2, and DR5, constitutes *tacit admission* under common law that:

i. No city-wide health crisis exists (DR1)

ii. No broad community consensus supports the ordinance (DR2)

iii. No economic data links noise to property values (DR3)

- iv.** No comprehensive legal foundation supports the ordinance's scope (DR4)
- v.** No pervasive enforcement need exists (DR5)
- vi.** The purported/potential BIE lacks factual basis as required by *Fla. Stat. § 166.041(4)(a)* (DR6)

b. These admissions undermine the factual and legal predicates claimed in the January 28, 2025, agenda packet, rendering Ordinance 2025-05 procedurally deficient and substantively unsupported.

D. Available Remedies

1. Administrative Remedies

a. Mediation: *Fla. Stat. § 16.60* establishes the Attorney General's mediation program specifically for public records disputes, providing an efficient resolution mechanism.

b. Government Conflict Resolution: *Fla. Stat. § 164.1051* requires mediation for governmental disputes, including those related to ordinances.

2. Judicial Remedies

a. Mandamus: To compel production of withheld records under *Fla. Stat. § 119.07*. The administrative default strengthens this claim by documenting the city's persistent non-compliance.

b. Declaratory Relief: To address the procedural deficiencies in the BIE process under *Fla. Stat. § 166.041(4)(a)*, leveraging the adverse inferences established through ADACL.

c. Injunctive Relief: To prevent enforcement of an ordinance lacking factual or legal foundation, as demonstrated by the city's silence on critical supporting documentation.

d. Attorney's Fees: *Fla. Stat. § 119.12* mandates fee awards when agencies unlawfully withhold records, a determination strengthened by the documented non-compliance through the ADACL process.

E. Conclusion

The Administrative Default at Common Law has effectively documented and formalized the City of St. Pete Beach's persistent failure to fully respond to public records request PRR2025-22. Under common law principles incorporated through *Fla. Stat. § 2.01* and reinforced by modern cases like *Vacation Ventures and Elliott*, this silence constitutes tacit admission that critical documentation allegedly supporting *Ordinance 2025-05* either does not exist or would contradict the city's public claims. These admissions by default reveal substantive and procedural deficiencies that undermine the ordinance's validity and open multiple avenues for relief, from administrative remedies to judicial intervention. The ADACL process has established a clear record of non-compliance that strengthens subsequent enforcement actions under Chapter 119 and challenges to the ordinance itself.

Citations:

Cases:

Elliott v. Aurora Loan Servs., LLC, 31 So. 3d 304 (Fla. 4th DCA 2010)

Vacation Ventures, Inc. v. Holiday Promotions, Inc., 687 So. 2d 286 (Fla. 5th DCA 1997)

Tribune Co. v. Cannella, 458 So. 2d 1075 (Fla. 1984)

Siegmeister v. Johnson, 240 So. 3d 70 (Fla. 1st DCA 2018)

Public Health Trust of Dade Cnty. v. Valcin, 507 So. 2d 596 (Fla. 1987)

Consumer Rights, LLC v. Bradford County, 153 So. 3d 394 (Fla. 1st DCA 2014)

State v. Ashley, 701 So. 2d 338 (Fla. 1997)

Statutes:

Fla. Stat. § 119.07 (2023)

Fla. Stat. § 166.041(4)(a) (2023)

Constitutionally Yours, Signed , 03/26/2025
Geoffrey Caputo

MEMORANDA OF LAW IN SUPPORT OF ADMINISTRATIVE DEFAULT AT COMMON LAW

The Administrative Default at Common Law (ADACL) process, though unconventional, emerges as a valid administrative remedy, rooted in Florida's adoption of English common law and reinforced by statutory mandates and judicial precedents that address agency non-compliance. This memoranda demonstrates how ADACL leverages silence, default admissions, and adverse inferences to uphold transparency and accountability under Chapter 119, Florida Statutes.

Table of Authorities

	Authority	Explanation
Foundational Common Law Principles	<i>Fla. Stat. § 2.01</i>	Adopts English common law of general nature as of July 4, 1776, unless inconsistent with U.S. or Florida law. Establishes the foundational role of common law in Florida's legal system, providing the basis for principles like tacit acquiescence
	<i>Fla. Stat. § 775.01</i>	Applies English common law to crimes unless modified by statute, reinforcing the persistence of common law principles in Florida jurisprudence.
	<i>State v. Ashley, 701 So. 2d 338 (Fla. 1997)</i>	Affirms that common law principles persist unless expressly abrogated by statute, confirming their ongoing relevance in legal arguments.
	<i>State v. Mitchell, 245 So. 2d 618 (Fla. 1971)</i>	Cites Blackstone on common law rights, demonstrating the enduring influence of common law maxims in Florida courts.
	<i>City of Daytona Beach v. Del Percio (476 So. 2d 197 (1985))</i>	Supports common law viability alongside statutes when non-conflicting, per weakness B analysis.

Common Law Maxims	<i>Qui tacet consentire videtur</i>	<p>"He who is silent appears to consent." A core common law maxim establishing tacit acquiescence, where silence is interpreted as agreement or admission—key to default mechanisms.</p>
	<i>Qui tacet consentire videtur</i>	<p>"He who is silent appears to consent." A core common law maxim establishing tacit acquiescence, where silence is interpreted as agreement or admission—key to default mechanisms.</p>
	<i>Tacita quaedam habentur pro expressis</i>	<p>"Things silent are sometimes considered as expressed." Supports the notion that silence can imply consent, reinforcing the legal weight of non-response.</p>
	<i>Ejus est non nolle, qui potest velle</i>	<p>"He who may consent tacitly, may consent expressly." Validates tacit consent as legally binding, linking common law to procedural defaults.</p>
	<i>Blackstone's Commentaries, Book I, Section III</i>	<p>Explains that the authority of common law maxims stems from their consistent use in judicial practice and established custom, not from legislation. This is evident in Florida cases like Vacation Ventures (where silence shifts the burden of proof) and Horowitz (where silence implies acquiescence), demonstrating how courts apply maxims such as qui tacet to uphold their legal force</p>
Public Records Statutory Framework	<i>Fla. Stat. § 119.07(1)(a)</i>	<p>Mandates that public records be open for inspection and copying at any reasonable time, forming the statutory foundation for initiating a public records request.</p>

PR Framework, Cont'd	<i>Fla. Stat. § 119.07(1)(d)</i>	Instructs custodians to redact exempt portions and provide the remainder, ensuring partial compliance when full disclosure isn't possible.
	<i>Fla. Stat. § 119.07(1)(e)</i>	Requires a statement of the basis for complete exemption, ensuring transparency when records are withheld entirely.
	<i>Fla. Stat. § 119.07(1)(f)</i>	Holds that automatic delays impermissibly interfere with the public's right to prompt access, emphasizing the need for timely responses to requests.
	<i>Tribune Co. v. Cannella, 458 So. 2d 1075 (Fla. 1984)</i>	Holds that automatic delays impermissibly interfere with the public's right to prompt access, emphasizing the need for timely responses to requests.
	<i>Consumer Rights, LLC v. Bradford County, 153 So. 3d 394 (Fla. 1st DCA 2014)</i>	Stresses prompt acknowledgment and good faith responses, setting expectations for custodial diligence.
	<i>Promenade D'Iberville, LLC v. Sundy, 145 So. 3d 980 (Fla. 1st DCA 2014)</i>	Permits delays only under limited circumstances, reinforcing the priority of promptness in public records access.
	<i>Siegmeister v. Johnson, 240 So. 3d 70 (Fla. 1st DCA 2018)</i>	Reiterates requirements for prompt attention and reasonable response times, aligning with statutory intent
	<i>Executive Office of Governor v. Florida Center for Government Accountability, Inc.</i>	Notes that the Public Records Act demands prompt attention and reasonable response times, further supporting timeliness obligations.
Affidavits : Evidentiary Role	<i>Elliott v. Aurora Loan Servs., LLC, 31 So. 3d 304 (Fla. 4th DCA 2010)</i>	Holds that uncontradicted affidavits support findings for the affiant, establishing their legal weight in asserting facts (e.g., non-existence of records).

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Affidavits, Cont'd	<i>Holl v. Talcott</i> , 191 So. 2d 40 (Fla. 1966)	Highlights affidavits' importance in summary judgment, showing their role in establishing unopposed facts.
	<i>Nard, Inc. v. DeVito Contracting & Supply, Inc.</i> , 769 So. 2d 1138 (Fla. 2d DCA 2000)	Confirms that unrebutted affidavits are taken as true, critical for proving non-compliance in the default process.
Administrative Default Mechanisms	<i>Fla. Admin. Code R. 28-106.111(4)</i>	States that failure to request a hearing within the allotted time waives rights, leading to a final order—parallels common law default via non-response.
	<i>Fla. Admin. Code R. 12-6.003(3)</i>	Non-response to a tax assessment notice finalizes the assessment, illustrating administrative default in regulatory contexts.
	§ 212.12(5), <i>Fla. Stat</i>	Allows assessments based on available information if records aren't provided, supporting default mechanisms when evidence is withheld.
	<i>Dep't of Revenue v. Vanjaria Enters., Inc.</i> , 675 So. 2d 252 (Fla. 5th DCA 1996)	Upholds a default tax assessment for failure to provide records, applying administrative default principles.
	<i>Florida Dep't of Revenue v. New Sea Escape Cruises, Ltd.</i> , 894 So. 2d 954 (Fla. 2005)	Affirms assessments based on available data, reinforcing administrative authority in default scenarios.
	<i>Cortiñas v. Dep't of Bus. & Prof'l Regulation</i> , 2019 WL 123456 (Fla. Div. Admin. Hearings 2019)	Upholds a default order for non-appearance, showing default's enforceability in administrative proceedings.
Tacit Acquiescence : Application of	<i>Vacation Ventures v. Holiday Promo.</i> , 687 So. 2d 286 (Fla. 5th DCA 1997)	Failure to rebut affidavits shifts the burden, reflecting "qui tacet" and tying common law to judicial outcomes

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Tacit Acquiescence, Cont'd	<i>Horowitz v. Laske, 855 So. 2d 169 (Fla. 5th DCA 2003)</i>	Interprets silence as acquiescence in contracts, applying tacit acquiescence to modern disputes
Judicial Remedies & Standards of Review	<i>Article V, Section 4(b)(3), Fla. Const.</i>	Grants District Courts of Appeal authority to issue writs of prohibition, providing the jurisdictional basis for judicial remedies.
	<i>Rule 9.030(b)(3), Fla. R. App. P.</i>	Reaffirms the courts' power to issue writs of prohibition, enabling judicial intervention in administrative overreach.
	<i>Fla. Stat. § 166.041(4)(a)(1-4)</i>	Outlines procedural requirements for municipal ordinances, relevant to challenging ordinance validity based on missing documentation
	<i>Heller v. Doe, 509 U.S. 312 (1993)</i>	Illustrates rational basis review—government action is valid if rationally related to a legitimate interest—relevant to challenging ordinances.
	<i>Craig v. Boren, 429 U.S. 190 (1976)</i>	Establishes intermediate scrutiny, requiring a substantial relation to an important interest, applicable when rights are implicated but not fundamental.
	<i>Loving v. Virginia, 388 U.S. 1 (1967)</i>	Applies strict scrutiny, requiring narrow tailoring to a compelling interest, used when fundamental rights are at stake.
	<i>Public Health Trust of Dade County v. Valcin, 507 So. 2d 596 (Fla. 1987)</i>	Permits adverse inferences when evidence is withheld, strengthening petitions for judicial relief when records are missing.
	<i>Martino v. Wal-Mart Stores, Inc., 908 So. 2d 342 (Fla. 2005)</i>	Clarifies spoliation requirements for adverse inferences, supporting claims of missing evidence.

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Judicial Remedies, Cont'd	<i>Golden Yachts, Inc. v. Hall</i> , 920 So. 2d 777 (Fla. 2d DCA 2006)	Applies adverse inferences to missing evidence, reinforcing their use in judicial proceedings
	<i>Hagopian v. Publix Supermarkets, Inc.</i> , 788 So. 2d 1088 (Fla. 4th DCA 2001)	Addresses adverse inferences in spoliation cases, emphasizing evidence preservation.
	<i>Sponco Mfg., Inc. v. Alcover</i> , 656 So. 2d 629 (Fla. 3d DCA 1995)	Discusses adverse inferences for withheld evidence, supporting judicial remedies.
	<i>Fla. Stat. § 119.12</i>	Mandates attorney's fees for unlawful withholding, providing a final enforcement mechanism for non-compliance.

I. ISSUES

(1): Are Florida public officials required to treat English common law as a binding legal authority?

(a)

(i) Fla. Stat. § 2.01: “The common and statute laws of England which are of a general and not a local nature, with the exception hereinafter mentioned, down to the 4th day of July, 1776, are declared to be of force in this state; provided, the said statutes and common law be not inconsistent with the Constitution and laws of the United States and the acts of the Legislature of this state.”

(ii) Fla. Stat. § 775.01: “The common law of England in relation to crimes [...] shall be of full force in this state where there is no existing provision by statute on the subject.”

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(iii): State v. Ashley, 701 So. 2d 338 (Fla. 1997): Affirms common law's persistence unless abrogated by statute.

(iv): Wilson v. Arkansas, 514 U.S. 927 (1995): Recognizes common law principles in Florida's legal framework.

(b):

Florida law explicitly incorporates English common law through *Fla. Stat. § 2.01*, making it binding unless contradicted by federal or state law. *Fla. Stat. § 775.01* extends this to criminal matters where statutes are silent, signaling a broad legislative intent to rely on common law. In *State v. Ashley*, the Florida Supreme Court confirmed that common law remains operative absent statutory override, while *Wilson v. Arkansas* illustrates its application by referencing historical common law principles (e.g., knock-and-announce rules). This framework mandates that public officials recognize English common law as authoritative in areas not addressed by statute, spanning civil, criminal, and administrative contexts.

(c): Florida public officials must recognize English common law as a binding legal authority where statutes are silent, as mandated by *Fla. Stat. § 2.01* and *Fla. Stat. § 775.01*, and affirmed by judicial precedent.

(2.1) Do common law maxims, as adopted in Florida, interpret silence as consent or an admission of fact?

(a):

(i) Qui tacet consentire videtur ("He who is silent appears to consent").

(ii) Tacita quaedam habentur pro expressis ("Things silent are sometimes considered as expressed").

(iii) Ejus est non nolle, qui potest velle ("He who may consent tacitly, may consent expressly").

(iv) Vacation Ventures v. Holiday Promo, 687 So. 2d 286 (Fla. 5th DCA 1997): Silence shifted the burden of proof.

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(v) Horowitz v. Laske, 855 So. 2d 169 (Fla. 5th DCA 2003): Silence interpreted as acquiescence in a contractual dispute.

(b): English common law maxims, adopted via Fla. Stat. § 2.01, establish that silence can signify consent or admission when a party has the chance to object but does not. Qui tacet consentire videtur underpins this principle, suggesting silence implies agreement. Florida courts have embraced this, as seen in *Vacation Ventures v. Holiday Promo*, where the court shifted the burden due to a party's silence, and *Horowitz v. Laske*, where silence was deemed acquiescence in a contract dispute. These cases reflect the maxims' integration into Florida law, showing silence as legally significant in the absence of rebuttal.

(c): Established common law maxims, recognized in Florida, interpret silence as consent or an admission of fact when a party fails to respond, as evidenced by judicial application.

(2.2) Do partial responses to certain document requests undermine the application of silence as consent for unanswered categories?

(a)

(i) Public Health Trust of Dade County v. Valcin, 507 So. 2d 596 (Fla. 1987): Adverse inferences apply when material evidence is withheld.

(ii) Nard, Inc. v. DeVito Contracting & Supply, Inc., 769 So. 2d 1138 (Fla. 2d DCA 2000): Unrebutted affidavits are accepted as true.

(b) A selective response while omitting other documents suggests strategic withholding rather than good-faith compliance. Per *Vacation Ventures (Id.)*, silence on specific points, not total non-response, triggers consent under *qui tacet consentire videtur*. *Valcin* supports adverse inferences for withheld material, and *Nard* reinforces this with the ADACL affidavit's documentation of non-compliance, establishing a pattern of evasion.

(c) A partial response does not negate silence as consent for unanswered categories; it reinforces default on those specific points.

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(3) Are Blackstone's Commentaries considered an authoritative source for interpreting common law maxims in Florida?

(a): Blackstone's Commentaries: A seminal work on English common law, frequently cited by Florida courts.

(i): State v. Mitchell, 245 So. 2d 618 (Fla. 1971): References Blackstone for common law interpretation.

(ii): Wilson v. Arkansas, 514 U.S. 927 (1995): Cites Blackstone as influential in Florida's legal system.

(b): Florida courts regularly turn to Blackstone's Commentaries to elucidate common law principles, affirming its authority. In *State v. Mitchell*, the court relied on Blackstone to define common law doctrines, while *Wilson v. Arkansas* used it to trace the origins of legal rules like knock-and-announce, demonstrating its relevance in Florida. Adopted through Fla. Stat. § 2.01, Blackstone's work provides a foundational lens for interpreting maxims, bridging historical English law to modern Florida practice.

(c): Florida law recognizes Blackstone's Commentaries as authoritative for interpreting common law maxims, as shown by consistent judicial reliance.

(4) Does Florida law validate common law maxims based on their historical custom and usage?

(a):

(i) Fla. Stat. § 2.01: Incorporates English common law, including its maxims.

(ii) Blackstone's Commentaries, Book I, Section III: "The only method of proving, that this or that maxim is a rule of the common law, is by showing that it hath been always the custom to observe it."

(iii) Vacation Ventures v. Holiday Promo, 687 So. 2d 286 (Fla. 5th DCA 1997): Applies maxims based on historical use.

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(iii) Horowitz v. Laske, 855 So. 2d 169 (Fla. 5th DCA 2003): Recognizes maxims' customary application.

(b) Per Fla. Stat. § 2.01, Florida adopts English common law, including maxims rooted in historical custom, as Blackstone articulates in Book I, Section III. This custom-based validation is evident in *Vacation Ventures v. Holiday Promo*, where the court applied *qui tacet consentire videtur* due to its longstanding use, and *Horowitz v. Laske*, where silence as consent reflected historical practice. These cases illustrate that Florida courts uphold maxims when their consistent historical application is demonstrated, aligning with Blackstone's standard.

(c) Florida law recognizes common law maxims based on their historical custom and usage, as supported by Fla. Stat. § 2.01 and judicial precedent.

(5.1) Does the concept of default admissions in ADACL align with Florida's administrative law practices?

(a)

(i) Fla. Admin. Code R. 28-106.111(4): "Failure to file a request for a hearing within the time prescribed shall constitute a waiver of the right to a hearing."

(ii) Fla. Admin. Code R. 12-6.003(3): "If the taxpayer does not timely file a protest, the assessment or refund denial shall become final."

(iii) Fla. Stat. § 212.12(5): "The department may use ... any available data to estimate the tax due."

(iv) Dep't of Revenue v. Vanjaria Enters., Inc., 675 So. 2d 252 (Fla. 5th DCA 1996): Upholds default assessments for non-response.

Florida Dep't of Revenue v. New Sea Escape Cruises, Ltd., 894 So. 2d 954 (Fla. 2005): Affirms assessments based on available data when records are withheld.

(b) Florida's administrative law explicitly supports default admissions when parties fail to act. *Fla. Admin. Code R. 28-106.111(4)* deems non-response a waiver of hearing rights, while *Fla. Admin. Code R. 12-6.003(3)* finalizes assessments absent a timely protest. Fla. Stat. § 212.12(5) permits tax estimations when taxpayers withhold data, effectively a default admission. In *Dep't of Revenue v. Vanjaria Enters., Inc.*, the court upheld a default assessment due to non-compliance, and *Florida Dep't of Revenue v. New Sea Escape Cruises, Ltd.* reinforced this by affirming estimates based on available evidence. ADACL's

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use of default admissions—treating silence as consent or fact admission—mirrors these practices, leveraging non-response as a procedural consequence. These authorities collectively demonstrate that defaults are a recognized and enforceable mechanism in Florida’s administrative actions, supporting ADACL’s framework.

(c) The concept of default admissions in ADACL is consistent with Florida’s established administrative law practices, as evidenced by administrative codes and supporting case law.

(5.2) Are administrative defaults limited to codified contexts, making their extension to public records requests improper?

(a) Fla. Stat. § 2.01 (*common law in effect unless abrogated*) , Vanjaria, Nard, Inc. (Id.)

(b) Administrative defaults reflect a universal principle of consequences for non-response, per Fla. Stat. § 2.01. Vanjaria demonstrates this in tax contexts, applicable to public records due to structural similarities (formal demands with response duties). The ADACL affidavit, per Nard, provides specific evidence of non-compliance, extending general principles to this context.

(c) Administrative defaults in ADACL align with Florida law and extend appropriately to public records requests.

(6) Does ADACL improperly depend on judicial default judgments under Florida Rule of Civil Procedure 1.500?

(a)

(i) Florida Rule of Civil Procedure 1.500: Governs judicial default judgments when a party fails to plead or defend in court.

(ii) Fla. Admin. Code R. 28-106.111(4): Establishes waiver of rights for non-response in administrative proceedings.

(iii) Dep’t of Revenue v. Vanjaria Enters., Inc., 675 So. 2d 252 (Fla. 5th DCA 1996): Upholds administrative defaults without judicial intervention.

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(b) ADACL operates in an administrative, not judicial, context, distinguishing it from Florida Rule of Civil Procedure 1.500, which applies solely to court proceedings requiring judicial oversight. Instead, ADACL aligns with administrative mechanisms like Fla. Admin. Code R. 28-106.111(4), where failure to respond waives rights without court involvement. *Dep't of Revenue v. Vanjaria Enters., Inc.* exemplifies this, affirming an administrative assessment finalized due to non-response, independent of Rule 1.500. ADACL's reliance on common law maxims (e.g., *qui tacet consentire videtur*) and administrative waiver further separates it from judicial defaults, rooting it in agency authority rather than courtroom procedure.

(c) ADACL does not improperly rely on judicial default judgments under Florida Rule of Civil Procedure 1.500; it is grounded in administrative law and common law principles, distinct from judicial processes.

(7.1) Is ADACL legally valid despite being an unconventional and experimental process?

(a)

(i) Fla. Stat. § 2.01: Adopts English common law where statutes are silent.

(ii) Fla. Stat. § 119.07(1)(a): “Every person who has custody of a public record shall permit the record to be inspected and copied ... at any reasonable time.”

(iii) Fla. Admin. Code R. 28-106.111(4): Waiver of rights for failure to request a hearing.

(iv) Fla. Admin. Code R. 12-6.003(3): Finalizes assessments absent timely protest.

(v) Fla. Stat. § 212.12(5): Allows tax estimates from available data.

(vi) Dep't of Revenue v. Vanjaria Enters., Inc., 675 So. 2d 252 (Fla. 5th DCA 1996): Upholds administrative defaults.

(viii) Florida Dep't of Revenue v. New Sea Escape Cruises, Ltd., 894 So. 2d 954 (Fla. 2005): Affirms defaults based on available data.

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(ix) Elliott v. Aurora Loan Servs., LLC, 31 So. 3d 304 (Fla. 4th DCA 2010): Permits adverse inferences from un rebutted affidavits.

(b) ADACL’s unconventional nature does not negate its validity, as it builds on established legal foundations. Fla. Stat. § 2.01 allows common law to fill statutory gaps, such as the lack of specific remedies for prolonged silence under Fla. Stat. § 119.07(1)(a) (public records access). ADACL’s default mechanism aligns with Fla. Admin. Code R. 28-106.111(4) and Fla. Admin. Code R. 12-6.003(3), which treat non-response as waiver or finalization, and Fla. Stat. § 212.12(5), which permits agency action based on available data. Cases like Dep’t of Revenue v. Vanjaria Enters., Inc. and Florida Dep’t of Revenue v. New Sea Escape Cruises, Ltd. validate administrative defaults, while Elliott v. Aurora Loan Servs., LLC supports drawing adverse inferences from silence—consistent with ADACL’s approach. Though experimental, ADACL creatively applies these principles, making it a legitimate administrative remedy.

(c) The ADACL process is valid despite its unconventional and experimental nature, as it is supported by Florida’s common law adoption, administrative law practices, and judicial precedent.

(7.2) Will courts reject ADACL for lacking precedent, favoring Chapter 119 remedies?

(a)

(i) State v. Ashley, 701 So. 2d 338 (Fla. 1997), Fla. Stat. § 2.01: Common law persists absent statutory repeal.

(ii) City of Daytona Beach v. Del Percio : Common law viable alongside statutes if non-conflicting.

(b) Fla. Stat. § 2.01 and State v. Ashley affirm common law’s role where statutes are silent, like pre-litigation defaults. Del Percio supports ADACL as complementary to Chapter 119, addressing evidentiary gaps (e.g., non-compliance documentation) rather than conflicting with judicial remedies.

(c) Courts should accept The ADACL as a valid common law supplement to statutory remedies.

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(7.3) Is ADACL redundant given Chapter 119's mandamus and fee provisions?

(a)

(i) **Fla. Stat. § 119.07(1)(a)**: Requires prompt access, silent on pre-litigation defaults.

(ii) **State v. Ashley, Id.**

(b) Chapter 119 lacks pre-litigation consequences for partial compliance or refusal to admit non-existence (e.g., tally sheet zeros), a gap *State v. Ashley* allows common law to fill. ADACL's three-stage process creates an evidentiary record enhancing mandamus, not duplicating it.

(c) ADACL is not redundant; it addresses a distinct pre-litigation gap.

(7.3) Will courts require exhaustion of Chapter 119 remedies before ADACL inferences?

(a)

(i) **Fla. Stat. § 166.041(4)(a)**: Mandates Business Impact Estimates.

(ii) **Nard, Inc., Id.** Unrebutted affidavits establish facts.

(b) ADACL's three-stage process (Courtesy, Fault, Default) documents exhaustion efforts, per *Nard*. **Chapter 119 cannot compel admission of non-existence, a gap ADACL fills**, especially for Fla. Stat. § 166.041(4)(a) violations (e.g., missing BIE), providing specific statutory grounds for inferences.

(c) ADACL satisfies exhaustion via its process and addresses unique gaps.

(7.4) Does ADACL's goal of securing judicial recognition of an agency's refusal to confirm document non-existence (e.g., by marking "zeros" on a tally sheet) when no exemptions are claimed render it invalid, given mandamus's traditional role under Chapter 119?

(a) **Fla. Stat. § 119.07(1)(a)**: Mandates prompt access to records but is silent on compelling admissions of non-existence.

(a) **Fla. Stat. § 119.07(1)(e)**: Requires citation of exemptions for withholding, implying a duty to clarify non-existence when no exemptions apply.

(b) **State v. Ashley, 701 So. 2d 338 (Fla. 1997)**: Common law fills statutory gaps unless abrogated.

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(c) **Nard, Inc. v. DeVito Contracting & Supply, Inc., 769 So. 2d 1138 (Fla. 2d DCA 2000):** Unrebutted affidavits establish facts, supporting evidentiary recognition.

(d) **Elliott v. Aurora Loan Servs., LLC, 31 So. 3d 304 (Fla. 4th DCA 2010):** Uncontradicted affidavits support findings, applicable to judicial recognition of non-compliance.

- (b) Mandamus under Chapter 119 typically compels production of existing records or forces an agency to justify withholding via exemptions (Fla. Stat. § 119.07(1)(e)). However, it lacks a mechanism to address an agency's refusal to affirmatively state that requested records (e.g., health studies, BIEs) do not exist, especially when no exemptions are claimed. This refusal—evidenced by the city's failure to mark "zeros" despite multiple notices—creates a transparency gap that Fla. Stat. § 119.07(1)(a) doesn't resolve. Per *State v. Ashley*, common law can bridge this gap. ADACL's three-stage process documents this refusal under oath (Nard), enabling courts to recognize it as a fact (Elliott), not just compel production. This evidentiary role distinguishes ADACL from mandamus, aligning with its unconventional yet valid purpose of establishing non-existence rather than forcing disclosure.
- (c) ADACL's focus on judicial recognition of non-existence is legally valid, addressing a gap mandamus cannot fill, supported by common law and evidentiary principles.

(8.1) Can adverse inferences be drawn about the legitimacy of an agency's ordinances or actions due to its non-response, partial fulfillment, lack of relevant documents, and non-compliance with Chapter 119 protocols?

(a)

(i) **Fla. Stat. § 119.07(1)(a):** Mandates public records be open for inspection at reasonable times.

(ii) **Fla. Stat. § 119.07(1)(c):** Requires prompt acknowledgment and good faith response.

(iii) **Fla. Stat. § 119.07(1)(d):** Instructs redaction of exempt portions, providing remainder.

(iv) **Fla. Stat. § 119.07(1)(e):** Requires statutory citation for complete exemptions.

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(v) Fla. Stat. § 119.07(1)(f): Mandates written explanation for exemptions.

(vi) Fla. Stat. § 119.12: Imposes attorney's fees for unlawful withholding.

(vii) Tribune Co. v. Cannella, 458 So. 2d 1075 (Fla. 1984): Prohibits automatic delays.

(viii) Promenade D'Iberville, LLC v. Sundy, 145 So. 3d 980 (Fla. 1st DCA 2014): Limits delays to retrieval and redaction.

(ix) Consumer Rights, LLC v. Bradford County, 153 So. 3d 394 (Fla. 1st DCA 2014): Condemns unjustified delays and demands good faith.

(x) Siegmeister v. Johnson, 240 So. 3d 70 (Fla. 1st DCA 2018): Affirms reasonable response times (e.g., two weeks).

(xi) Executive Office of Governor v. Florida Center for Government Accountability, Inc., -So. 3d - (Fla. 1st DCA 2025): Upholds two-week partial production as reasonable.

(xii) Elliott v. Aurora Loan Servs., LLC, 31 So. 3d 304 (Fla. 4th DCA 2010): Permits adverse inferences from un rebutted affidavits.

(xiii) Heller v. Doe, 509 U.S. 312 (1993): Requires rational basis for governmental action.

(xiv) Craig v. Boren, 429 U.S. 190 (1976): Demands substantial relation to a government interest.

(xv) Loving v. Virginia, 388 U.S. 1 (1967): Requires compelling interest and narrow tailoring.

(b) Agency opaqueness—non-response, partial fulfillment, irrelevant production, and non-compliance with Fla. Stat. § 119.07(1)(a) (prompt access), (1)(c) (good faith), (1)(d)-(f) (redaction and explanation)—violates statutory duties, as reinforced by *Tribune Co. v. Cannella* (no delays), *Promenade D'Iberville* (limited delays), and *Consumer Rights* (good faith required). *Siegmeister* and *Executive Office of Governor* establish two weeks as a reasonable response benchmark, yet persistent silence exceeds this. Under *Elliott v. Aurora*

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Loan Servs., un rebutted affidavits asserting non-existence of records provide prima facie evidence, permitting adverse inferences. This opaqueness suggests no documentation supports the agency's actions, undermining their legitimacy under *Heller v. Doe* (rational basis), *Craig v. Boren* (substantial relation), and *Loving v. Virginia* (compelling interest, narrowly tailored), as no evidence rebuts the inference of arbitrariness. Fla. Stat. § 119.12 further penalizes such withholding, bolstering the inference's weight.

(c) Agency opaqueness allows adverse inferences that their ordinances or actions lack a legitimate basis, as supported by Chapter 119 violations, Elliott's evidentiary rule, and constitutional scrutiny standards.

(8.2) Do courts require bad faith beyond silence, with partial responses negating default?

(a) *Valcin, Id.* Adverse inferences from withheld evidence.

(b) *Valcin* focuses on control over evidence, not bad faith, applicable to withheld critical categories, Partial responses to less material requests versus omission of key documents (*Ex. Business Impact Estimates/Public Health Data/Declining Property Values*) suggest strategic withholding, not good faith.

(c) Adverse inferences are justified by strategic withholding, not requiring bad faith.

(9) CONCLUSION:

(a) The Administrative Default at Common Law (ADACL) process, while unconventional, is a valid administrative remedy substantiated by a robust interplay of Florida statutes, common law principles, and judicial precedent. Florida public officials must recognize

English common law as binding under Fla. Stat. § 2.01 and § 775.01, as affirmed by *State v. Ashley* and *Wilson v. Arkansas* [(1)]. This includes established maxims like *qui tacet consentire videtur*, which interpret silence as consent or admission, as applied in *Vacation Ventures v. Holiday Promo* and *Horowitz v. Laske* [(2)]. Florida law further acknowledges Blackstone's Commentaries as authoritative for interpreting these maxims (*State v. Mitchell*, *Wilson v. Arkansas*) [(3)] and validates them based on historical custom and usage, per Blackstone's own standard (*Vacation Ventures*, *Horowitz*) [(4)].

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(b) In administrative contexts, ADACL’s default admissions align with Florida practices, such as waivers and final assessments for non-response under Fla. Admin. Code R. 28-106.111(4), R. 12-6.003(3), and Fla. Stat. § 212.12(5), upheld in *Dep’t of Revenue v. Vanjaria Enters.* and *Florida Dep’t of Revenue v. New Sea Escape Cruises* [(5)]. ADACL does not improperly rely on judicial defaults under Florida Rule of Civil Procedure 1.500, instead rooting itself in administrative and common law mechanisms [(6)]. Despite its novelty, ADACL’s validity is supported by this legal foundation, including *Elliott v. Aurora Loan Servs.*’s adverse inference rule [(7)]. Finally, agency opaqueness—non-response, partial fulfillment, and non-compliance with Chapter 119 protocols—permits adverse inferences about the legitimacy of their actions, per *Elliott*, *Heller v. Doe*, *Craig v. Boren*, and *Loving v. Virginia*, reinforcing ADACL’s utility [(8)]. Together, these principles affirm ADACL as a legitimate, informal administrative tool to address agency silence.

II. Response Guide

Knowing how novel, unconventional, experimental, and informal is the ADACL premise, this **Response Guide** is submitted in good faith to facilitate constructive dialogue regarding the Notice of Administrative Default at Common Law (ADACL) concerning Public Records Request PRR2025-22. The guide aims to clarify positions, invite feedback, and refine mutual understanding while maintaining dignity, professionalism and respect.

Please attach / remit separate document if necessary, indexing each alphanumeric paragraph and subparagraph should exception be taken at any point. If any of the following are in question, note that each response guide number below corresponds with the aforementioned Issue numbers above, with the same citations of law. Referring to the Table Of Authorities may also be more expedient.

(1) Must Florida Public Officials Recognize The Common Law Of England As A Binding Legal Authority?

- (a) **Legal Basis:** *Fla. Stat. § 2.01, Fla. Stat. § 775.01, State v. Ashley, 701 So. 2d 338 (Fla. 1997), Wilson v. Arkansas, 514 U.S. 927 (1995)*

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(b) **Discussion:** Florida law incorporates English common law as a foundational source where statutes don't provide specific guidance. This suggests officials should consider common law principles in their duties.

(c) **Feedback:**

☐ Agree

☐ Disagree with Contradictory Analysis:

(2) Do Established Common Law Maxims Interpret Silence As Consent Or An Admission Of Fact?

(a) **Legal Basis:**

- *Qui tacet consentire videtur, Tacita quaedam habentur pro expressis, Ejus est non nolle, qui potest velle, Vacation Ventures v. Holiday Promo., 687 So. 2d 286 (Fla. 5th DCA 1997), Horowitz v. Laske, 855 So. 2d 169 (Fla. 5th DCA 2003), Public Health Trust of Dade County v. Valcin, 507 So. 2d 596 (Fla. 1987), Nard, Inc. v. DeVito Contracting & Supply, Inc., 769 So. 2d 1138 (Fla. 2d DCA 2000)*

(b) **Discussion:**

- (i) Common law maxims and Florida cases suggest silence implies consent or admission when response is possible but absent.
- (ii) **Addressing Partial Response Challenge:** If only a selective response is provided; while others are withheld, or not admitted as non-existent, such doesn't negate consent for unanswered points. *Vacation Ventures* applies *qui tacet* to specific silences, *Valcin* draws inferences from withheld evidence, and *Nard* accepts affidavit-documented evasion as fact.

(c) **Feedback:**

☐ Agree

☐ Disagree with Contradictory Analysis:

(3) Does Florida Law Recognize Blackstone's Commentaries As Authoritative For Interpreting Common Law Maxims?

(a) **Legal Basis:** *State v. Mitchell, 245 So. 2d 618 (Fla. 1971), Wilson v. Arkansas, 514 U.S. 927 (1995)*

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(b) **Discussion:** Florida courts often cite Blackstone's Commentaries when interpreting common law, which serves as evidence of its authority.

(c) **Feedback:**

- ☐ Agree
- ☐ Disagree with Contradictory Analysis:

(4) Does Florida Law Recognize Common Law Maxims Based On Their Historical Custom And Usage?

(a) **Legal Basis:** *Fla. Stat. § 2.01, Blackstone's Commentaries, Vacation Ventures v. Holiday Promo, 687 So. 2d 286 (Fla. 5th DCA 1997), Horowitz v. Laske, 855 So. 2d 169 (Fla. 5th DCA 2003)*

(b) **Discussion:** Florida law accepts maxims based on their historical use, as Blackstone suggests and courts have applied.

(c) **Feedback:**

- ☐ Agree
- ☐ Disagree with Contradictory Analysis:

(5) Is the Concept of Default Admissions, as Used in ADACL, Consistent with Established Administrative Law Practices in Florida?

(a) **Legal Basis:** *Fla. Admin. Code R. 28-106.111(4), Fla. Admin. Code R. 12-6.003(3), Fla. Stat. § 212.12(5), Dep't of Revenue v. Vanjaria Enters., Inc., 675 So. 2d 252 (Fla. 5th DCA 1996), Florida Dep't of Revenue v. New Sea Escape Cruises, Ltd., 894 So. 2d 954 (Fla. 2005), Fla. Stat. § 2.01, Nard, Inc. v. DeVito Contracting & Supply, Inc., 769 So. 2d 1138 (Fla. 2d DCA 2000)*

(b) **Discussion:**

- (i) Florida's administrative rules and cases support default admissions as a matter of so stated "*custom and usage*" under common law when parties don't respond, consistent with ADACL.

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- (ii) **Addressing Limited Application:** Defaults aren't limited to codified contexts; *Fla. Stat. § 2.01* extends common law principles universally, *Vanjaria* applies them administratively, and *Nard* supports affidavit-based extensions to public records.

(c) **Feedback:**

- ☐ Agree
- ☐ Disagree with Contradictory Analysis:

(6) Does ADACL Improperly Depend on Judicial Default Judgments Under Florida Rule of Civil Procedure 1.500?

- (a) **Legal Basis:** *Florida Rule of Civil Procedure 1.500, Fla. Admin. Code R. 28-106.111(4), Dep't of Revenue v. Vanjaria Enters., Inc., 675 So. 2d 252 (Fla. 5th DCA 1996).*
- (b) **Discussion:** ADACL operates administratively, distinct from Rule 1.500's judicial scope, aligning with Fla. Admin. Code R. 28-106.111(4)'s waiver and Vanjaria's administrative default precedent.

(c) **Feedback:**

- ☐ Agree
- ☐ Disagree with Contradictory Analysis:

(7) Is ADACL Legally Valid Despite Being an Unconventional and Experimental Process?

- (a) **Legal Basis:** *Fla. Stat. § 2.01, Fla. Stat. § 119.07(1)(a), Fla. Admin. Code R. 28-106.111(4), Fla. Admin. Code R. 12-6.003(3), Fla. Stat. § 212.12(5), Dep't of Revenue v. Vanjaria Enters., Inc., 675 So. 2d 252 (Fla. 5th DCA 1996), Florida Dep't of Revenue v. New Sea Escape Cruises, Ltd., 894 So. 2d 954 (Fla. 2005), Elliott v. Aurora Loan Servs., LLC, 31 So. 3d 304 (Fla. 4th DCA 2010), State v. Ashley, 701 So. 2d 338 (Fla. 1997), City of Daytona Beach v. Del Percio (476 So. 2d 197 (1985) Fla. Stat. § 166.041(4)(a), Nard, Inc. v. DeVito Contracting & Supply, Inc., 769 So. 2d 1138 (Fla. 2d DCA 2000)*

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(b) Discussion:

- (i) ADACL's validity rests on common law (*Fla. Stat. § 2.01*), administrative defaults (*Vanjaria, New Sea Escape*), and evidentiary support (*Elliott*), despite its novelty.
- (ii) **Addressing Judicial Reception:** *State v. Ashley* and *Del Percio* affirm common law's role alongside statutes, making ADACL complementary.
- (iii) **Addressing Redundancy:** *State v. Ashley* fills Chapter 119's pre-litigation gap, enhanced by ADACL's process.
- (iv) **Addressing Exhaustion:** The three-stage process and *Nard* affidavits satisfy exhaustion, with *Fla. Stat. § 166.041(4)(a)* providing specific grounds.
- (v) **Addressing Mandamus Limitation:** Unlike mandamus, which seeks production, ADACL seeks recognition of refusal to admit non-existence, documented via affidavits (*Nard, Elliott*), making it a distinct and necessary tool.

(c) Feedback:

- ☐ Agree
- ☐ Disagree with Contradictory Analysis:

(8) Can Adverse Inferences Be Drawn About the Legitimacy of an Agency's Ordinances or Actions Due to Its Non-Response, Partial Fulfillment, Lack of Relevant Documents, and Noncompliance with Chapter 119 Protocols?

- (a) **Legal Basis:** *Fla. Stat. § 119.07(1)(a), (1)(c), (1)(d), (1)(e), (1)(f), Fla. Stat. § 119.12, Tribune Co. v. Cannella, 458 So. 2d 1075 (Fla. 1984), Promenade D'Iberville, LLC v. Sundy, 145 So. 3d 980 (Fla. 1st DCA 2014), Consumer Rights, LLC v. Bradford County, 153 So. 3d 394 (Fla. 1st DCA 2014), Siegmeister v. Johnson, 240 So. 3d 70 (Fla. 1st DCA 2018), Executive Office of Governor v. Florida Center for Government Accountability, Inc., Elliott v. Aurora Loan Servs., LLC, 31 So. 3d 304 (Fla. 4th DCA 2010), Heller v. Doe, 509 U.S. 312 (1993), Craig v. Boren, 429 U.S. 190 (1976), Loving v. Virginia, 388 U.S. 1 (1967), Public Health Trust of Dade County v. Valcin, 507 So. 2d 596 (Fla. 1987), Fla. Stat. § 166.041(4)(a)*

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(b) Discussion:

(i) Non-compliance (*Fla. Stat. § 119.07*) and silence (*Elliott*) permit inferences of illegitimacy under scrutiny standards (*Heller, Craig, Loving*).

(ii) **Addressing Bad Faith vs. Silence:** Valcin infers from withheld evidence (e.g., Fla. Stat. § 166.041(4)(a) BIE), not requiring bad faith, given strategic omissions.

(c) Feedback:

- ☐ Agree
- ☐ Disagree with Contradictory Analysis:

CONCLUSION

This guide aims to clarify the legal basis for the ADACL and invites constructive feedback to refine our mutual understanding. Please provide your responses to each section, and if disagreeing, then indexing each alphanumeric point/sub point in the attached response with analysis, and feel free to include any additional insights or legal analyses that may contribute to a more comprehensive discussion.

Thank you for your attention to this matter. We look forward to your response and to working collaboratively towards a resolution.

Sincerely,



Geoffrey Jacob Caputo, March 26, 2025

Additional Records



Inbox



Ariana Wilson (S... 3:24 PM



to me, BVose ▾

Good afternoon Mr. Caputo,

Additional documents have been uploaded for this request and can be found under the 'response docs' section.

Thank you,

City Clerk's Office

City of St. Pete Beach

PRR2025-22 Thank You Letter For 2nd Partial & Reactive Production

Amber LaRowe
City Clerk
155 Corey Avenue
St. Pete Beach, FL 33706
April 7, 2025

USPS Cert: 9589 0710 5270 1053 4637 02

CORRESPONDENCE:

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4604 49TH ST. N #140
Kenneth City, FL 33709
floridarepublic@gmail.com

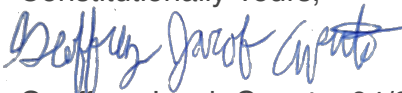
Greetings City Clerk LaRowe, (*Notice To Principle Is Notice To Agent/Notice To Agent Is Notice To Principle*):

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Constitutionally Yours,



Geoffrey Jacob Caputo, 04/07/2025

ATTACHED:

The Cascade of Absence : City of St Pete Beach Noise Ordinance Documents Request PRR2025-22

cc: Mayor Petrilla, Karen Marriott, District 1 / Lisa Robinson, District 2 / Betty Rzewnicki, District 3 / Joe Moholland District 4 / Ralf Brooks, Interim City Attorney

PRR2025-22 Thank You Letter For 2nd Partial & Reactive Production

Adrian Petrila
Mayor, St. Pete Beach,
155 Corey Avenue
St. Pete Beach, FL 33706

April 7, 2025

USPS Cert: 9589 0710 5270 1053 4637 19

CORRESPONDENCE:

Geoffrey Caputo
4604 49TH ST. N #140
Kenneth City, FL 33709
floridarepublic@gmail.com

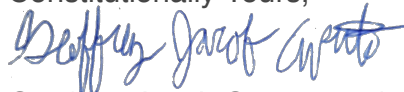
Servus Mayor Petrilla, (*Notice To Principle Is Notice To Agent/Notice To Agent Is Notice To Principle*):

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Geoffrey Jacob Caputo, 04/07/2025

ATTACHED:

The Cascade of Absence : City of St Pete Beach Noise Ordinance Documents Request PRR2025-22

cc: Karen Marriott Commissioner, District 1 / Lisa Robinson Commissioner, District 2 / Betty Rzewnicki Commissioner, District 3 / Joe Moholland Commissioner, District 4 / Ralf Brooks, Interim City Attorney

PRR2025-22 Thank You Letter For 2nd Partial & Reactive Production

Karen Marriott
Commissioner, District 1
155 Corey Avenue
St. Pete Beach, FL 33706

April 7, 2025

USPS Cert: 9589 0710 5270 1053 4637 26

CORRESPONDENCE:

Geoffrey Caputo
4604 49TH ST. N #140
Kenneth City, FL 33709
floridarepublic@gmail.com

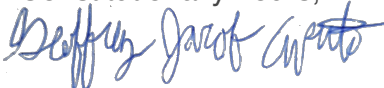
Greetings Commissioner Marriot, (*Notice To Principle Is Notice To Agent/Notice To Agent Is Notice To Principle*):

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Constitutionally Yours,



Geoffrey Jacob Caputo, 04/07/2025

ATTACHED:

The Cascade of Absence : City of St Pete Beach Noise Ordinance Documents Request PRR2025-22

cc: Mayor Petrilla ; Lisa Robinson Commiss.D2 ; Betty Rzewnicki Commiss. D3
Joe Moholland Commiss. D4 ; Ralf Brooks, Interim City Attorney

PRR2025-22 Thank You Letter For 2nd Partial & Reactive Production

Lisa Robinson
Commissioner, District 2
155 Corey Avenue
St. Pete Beach, FL 33706

April 7, 2025

USPS # 9589 0710 5270 1053 4637 33

CORRESPONDENCE:

Geoffrey Caputo
4604 49TH ST. N #140
Kenneth City, FL 33709
floridarepublic@gmail.com

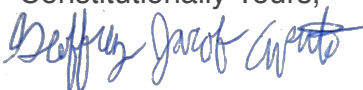
Greetings Commiss. Robinson (*Notice To Principle Is Notice To Agent/Notice To Agent Is Notice To Principle*):

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Geoffrey Jacob Caputo, 04/07/2025

ATTACHED:

The Cascade of Absence : City of St Pete Beach Noise
Ordinance Documents Request PRR2025-22

cc: Mayor Petrilla ; Karen Marriott Commiss.D1 / Betty Rzewnicki Commiss. D3 /
Joe Moholland Commiss.D4 / Ralf Brooks, Interim City Attorney

PRR2025-22 Thank You Letter For 2nd Partial & Reactive Production

Betty Rzewnicki
Commissioner, District 3
155 Corey Avenue
St. Pete Beach, FL 33706

April 7, 2025

USPS CERT: 9589 0710 5270 1053 4637 57

CORRESPONDENCE:

Geoffrey Caputo
4604 49TH ST. N #140
Kenneth City, FL 33709
floridarepublic@gmail.com

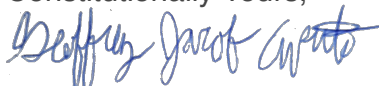
Greetings Commissioner Rzewnicki, *(Notice To Principle Is Notice To Agent/Notice To Agent Is Notice To Principle)*:

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Geoffrey Jacob Caputo, 04/07/2025

ATTACHED:

The Cascade of Absence : City of St Pete Beach Noise
Ordinance Documents Request PRR2025-22

cc: Adrian Petrila, Mayor / Karen Marriott Commissioner, District 1 / Lisa Robinson Commissioner, District 2
Joe Moholland Commissioner, District 4 / Ralf Brooks, Interim City Attorney

PRR2025-22 Thank You Letter For 2nd Partial & Reactive Production

Joe Moholland
Commissioner, District 4
155 Corey Avenue
St. Pete Beach, FL 33706
April 7, 2025

USPS CERT: 9589 0710 5270 1053 4637 64

CORRESPONDENCE:

Geoffrey Caputo
4604 49TH ST. N #140
Kenneth City, FL 33709
floridarepublic@gmail.com

Greetings Commissioner Moholland, (*Notice To Principle Is Notice To Agent/Notice To Agent Is Notice To Principle*):

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Geoffrey Jacob Caputo, 04/07/2025

ATTACHED:

The Cascade of Absence : City of St Pete Beach Noise
Ordinance Documents Request PRR2025-22

cc: Adrian Petrila, Mayor / Karen Marriott Commissioner, District 1 / Lisa Robinson Commissioner, District 2 /
Betty Rzewnicki Commissioner, District 3 / Ralf Brooks, Interim City Attorney

PRR2025-22 Thank You Letter For 2nd Partial & Reactive Production

Ralf Brooks
Interim City Attorney
155 Corey Avenue
St. Pete Beach, FL 33706
April 7, 2025

USPS CERT: 9589 0710 5270 1053 4636 89

CORRESPONDENCE:

Geoffrey Caputo
4604 49TH ST. N #140
Kenneth City, FL 33709
floridarepublic@gmail.com

Greetings Counselor Brooks, (*Notice To Principle Is Notice To Agent/Notice To Agent Is Notice To Principle*):

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Ordinance Documents Request PRR2025-22

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Betty Rzewnicki Commissioner, District 3 / Joe Moholland Commissioner, District 4

The Cascade of Absence :
City of St Pete Beach Noise Ordinance Documents Request
PRR2025-22 - Analysis, and Research by Geoffrey J. Caputo, B.F.A. / USF '98

CATEGORY	EXEMPT? Y OR N	2021	2022	2023	2024	2025	CHECK OFF
DR1: HEALTH IMPACT STUDIES (HIS)							
a: Documentation or research cited by the City Commission to support health impact claims				Staff Report (Dec 2023) - Page 6 mentions noise mitigation but no studies		1.EPA Report (1974) - General health data (Reference) 2.EPA Brochure: "The Environmental Frontier: Noise Control" 3. Noise Ord 2025-05 First Reading (2025)	Partial (2023) -1. No actual studies, just mitigation mention; EPA report is outdated and non-specific 2.Focused on careers, lacks relevant data or analysis
b: Health Impact Data (local, regional)							
DR2: COMMUNITY FEEDBACK RECORDS (CFR)							
c. Complaints, surveys, town hall minutes, public comments (last 3 years)				DR2.1 (Micklitsch, Sep 2023) - Slide 3: 11 complaints; Slide 5: resident quotes DR2.2 (Hysell, Sep 2023) - Slide 3: complaints; Slide 6: quotes DR2.3 (Letters, Dec 2023) - Pages 11-25: opposition letters DR2.4 (Correspondence, Nov-Dec 2023) - Pages 2, 3, 5: opposition emails			Received (2023) - Complaints and comments from 2023 only
d. Feedback on quality of life, health, or property values				DR2.1 - Slide 5: sleep disruption DR2.2 - Slide 6: sleep, Slide 9: property values DR2.3 - Pages 12, 15, 19: peace/sleep DR2.4 - Pages 2, 5: peace/sleep			Received (2023) - Specific impacts noted
e. Digital records (emails, social media)				DR2.4 - Emails from Nov-Dec 2023			Received (2023) - Emails only

The Cascade of Absence :
City of St Pete Beach Noise Ordinance Documents Request
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DR3: ECONOMIC IMPACT ASSESSMENTS (EIA)							
f. Studies linking noise to property value depreciation							
g. Historical Property Value Data (assessments, tax records)							
h. Appraisal Reports							
i. Comparative Sales Data							
j. Real Estate Market Analyses							
k. Noise Level Measurements (correlated with property values)							
l. Expert Testimonies or Opinions							
m. Public Feedback on Property Values				DR2.2 - Slide 9: property values mentioned (2023)			PARTIAL (2023) - ANECDOTAL MENTION, NO STUDY
n. Business Impact Studies (economic/ property value link)							
o. Zoning and Development Impact				DR1 - Zoning discussion (Dec 2023)			PARTIAL (2023) - ZONING CONTEXT, NO VALUE IMPACT
p. Academic/ Industry Research							

The Cascade of Absence :
City of St Pete Beach Noise Ordinance Documents Request
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q. Mitigation Efforts (before/ after studies)				DR1 - Page 6: mitigation wall (Dec 2023)			PARTIAL (2023) - MITIGATION NOTED, NO VALUE STUDY
DR4: LEGAL MEMOS OR OPINIONS (LMO)							
Legal analysis or correspondence						Agenda Report (2025) Summarizes legal rationale Dooley's Paper (Reference) - Legal precedents, not specific Vose's Presentation (2025) - Legal aspects, no enforcement data Legal Opinion (2025) - Constitutionality, limited analysis	PARTIAL (2025) - Legal rationale provided but incomplete analysis
DR5: ENFORCEMENT RECORDS (ER)							
Citations issued per year			DR5 - Noise surveys (2022-2023), no citation counts				PARTIAL (2022-2023) - NO SPECIFIC CITATION DATA
Locations of frequent violations			DR5 - 2007 Pag Way (2022-2023)				RECEIVED (2022-2023) - SPECIFIC LOCATION - NOT CITY WIDE DATA
Outcomes of enforcement actions				DR5 - "Potential violation" (page 16, 2023), no outcomes			PARTIAL (2023) - NO RESOLUTION DETAILS

The Cascade of Absence :
City of St Pete Beach Noise Ordinance Documents Request
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Reviews of enforcement effectiveness							
GIS mapping or visualizations							
DR6: BUSINESS IMPACT ESTIMATES (BIE)						Ord 2025-05 BIS (2025) Vague and narrow analysis	PARTIAL (2025) - BIE provided but criticized for vagueness
Complete BIE under Florida Statute 166.041(4)							
Analyses/ projections on business effects							
Business Impact Studies (economic/ property value link)							
Data/models on revenue, traffic, costs							
Correspondence/ meeting minutes							
Consultations with business organizations							

The Cascade of Absence :
City of St Pete Beach Noise Ordinance Documents Request
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I. Overview of the Agenda Packet Claims

The agenda packet for Ordinance 2025-02 (dated January 28, 2025) purports the basis for the new noise ordinance with four key claims:

1. **Health Impacts:** Excessive noise causes sleep disturbance, stress-related illnesses, and hearing loss, necessitating decibel limits to protect residents (*pages 5, 7*).
2. **Property Values:** Persistent noise reduces property values and affects economic stability (*pages 6, 8*).
3. **Community Feedback:** Numerous resident complaints over recent years demand stricter noise controls (*pages 4, 9*).
4. **Enforcement Needs:** The current ordinance lacks measurable standards, hindering enforcement (*pages 5, 10*).

These claims suggest a city-wide problem requiring a broad regulatory response. Let's evaluate how the provided documents from The City of St. Pete Beach support—or fail to support—these assertions.

The resulting documents request from PRR2025-22 should demonstrate the Legal Compliance issues:

- **Fl. Stat. §119.07(1)(c):** Their Response after 21 business days (February 5 to March 11, 2025) exceeds the 10-business day / 2 Calendar weeks precedent (*see Executive Office of the Governor, and Governor Ron DeSantis v. Florida Center for Government*

**The Cascade of Absence :
City of St Pete Beach Noise Ordinance Documents Request
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Accountability, Inc 1D2022-3507; (1st DCA); Siegmeister v. Johnson, 240 So. 3d 70 (Fla. 1st DCA 2018), partially compliant with DR1's provision, but late.

- Incomplete without a tally sheet or DR3, DR4, DR6 status - lack of clarity per Fl. Stat. §119.07(b).
- Barely statute conforming Business Impact Estimate ("BIE" - *Fl. Stat. 166.041(4)(a)1-4*).

II. 1st Round of Documents sent 3/11/2025

See Attached 3/11/2025 Tally Table For Reference

- (1) **SPB DOC1**: A 29-page staff report (not just a presentation) for Case No. 23034, a Development Review application for a mixed-use project at 7701 Blind Pass Road, St. Pete Beach, dated December 13, 2023, **over a year before Ordinance 2025-02's first reading**

(a) Key Points:

Page 6: Under "Neighborhood Compatibility," it discusses noise from a proposed restaurant's outdoor seating and amplified music, mitigated by a 6-foot masonry wall, a 10-foot setback, and compliance with the city's then-existing noise ordinance (Sec. 46-137). It notes the wall reduces noise levels below ordinance limits at property lines.

(b) Other Relevant Pages:

- (i) **Page 2**: Summarizes the project (hotel, restaurant, residential units) and mentions noise as a consideration.
- (ii) **Page 11**: Mentions a noise study requirement for amplified music permits, referencing Sec. 46-141(g), but no study is included.
- (iii) **Page 24**: Notes public comments, including noise concerns from nearby residents, but no health data.

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City of St Pete Beach Noise Ordinance Documents Request
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(c) General Scope: Focuses on zoning approval, site plan compliance, and mitigation measures, not health impacts of noise beyond ordinance adherence.

(d) How It Could Not Be Responsive:

- (i) Not a Health Study:** This is a staff report for a specific development, not a formal Health Impact Study with scientific data (e.g., noise levels' effects on sleep, stress). It focuses on zoning compliance, not health analysis, missing the depth of the request sought.
- (ii) Temporal Misalignment:** Dated 2023, it predates Ordinance 2025-02's drafting and doesn't address the new decibel-based standards or health claims from January 2025.
- (C) Limited Scope:** Noise is a compliance checkbox (e.g., wall height), not a health study. The referenced noise study (page 11) isn't included, leaving a gap.

(2) SPB DOC 2.1 (Community Feedback and Health.): A slide deck titled "Red White And Booze by Bob Micklitsch," presented to the City Commission on September 11, 2023 **16 months before Ordinance 2025-02's first reading**. Focuses on RWB's noise issues, community feedback, and regulatory history, predating Ordinance 2025-02's first reading (January 28, 2025).

(a) Key Points:

- (i) Slide 1:** Title page with date and presenter.
- (ii) Slide 2:** Lists RWB's address (5501 Gulf Blvd) and describes it as a live music venue with a history of noise complaints.
- (iii) Slide 3:** Mentions 11 noise complaints from January to September 2023, with a graph showing complaint frequency.

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- (iv) Slide 4:** Notes RWB's operation under a Special Magistrate Order limiting music to 11 PM, with violations cited.
- (v) Slide 5:** Highlights community impact, including resident quotes about noise disrupting sleep and quality of life.
- (vi) Slide 6:** Discusses prior noise ordinance (pre-2025-02), suggesting it was ineffective.
- (vii) Slide 7:** Proposes stricter enforcement or ordinance updates, referencing ongoing issues.
- (viii) Slide 8:** Concludes with a call for commission action on noise control.

(b) How It Could Not Be Responsive: *(same legal compliance issues as in (1)(D))*

- (I) Timing Misalignment:** Dated September 2023, it precedes Ordinance 2025-02's drafting and first reading (January 2025). Document request targeted feedback related to the ordinance's development or first reading, not prior issues.
- (II) Specificity:** Focuses on RWB, not the broader city-wide noise policy Ordinance 2025-02 addresses. It's venue-specific feedback, not ordinance-specific.
- (III) Not Comprehensive:** Captures complaints from one source (RWB) over 9 months, not a full record of community input across St. Pete Beach for the ordinance.

(c) Other Notes:

- (i) Precursor Role:** While not directly about Ordinance 2025-02, it reflects community noise concerns that may have prompted its creation, offering historical context.

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- (ii) **Partial Response:** DR2 aligns with community feedback but doesn't cover DR3, DR4, DR6, leaving the "completed" claim incomplete

(3) SPB DOC 2.2:

A slide deck titled "Red, White & Booze Noise Violations by Kenneth Hysell," presented to the City Commission on September 11, 2023 - 16 months before Ordinance 2025-02's first reading. Focuses on RWB's noise violations, resident complaints, and regulatory context, predating Ordinance 2025-02's first reading (January 28, 2025).

(a) Key Points:

- (i) **Slide 2:** Introduces RWB (5501 Gulf Blvd) as a live music venue with a history of noise issues.
- (ii) **Slide 3:** Lists 11 noise complaints from January to August 2023, with dates and times (e.g., 1/13/23 at 10:23 PM).
- (iii) **Slide 4:** Details a Special Magistrate Order (May 2023) limiting music to 11 PM, citing violations.
- (iv) **Slide 6:** Quotes residents (e.g., "Music so loud I can't sleep," "Noise is unbearable"), showing community impact.
- (v) **Slide 8:** Includes a map of complaint locations near RWB.
- (vi) **Slide 10:** Cites the existing noise ordinance (Sec. 46-137), noting its inadequacy.
- (vii) **Slide 14:** Suggests ordinance updates or enforcement changes, linking to ongoing noise problems.
- (viii) **Slide 16:** Ends with a call for commission action.

(b) How It Could Not Be Responsive:

- (I) **Temporal Gap:** From September 2023, it predates Ordinance 2025-02's drafting and first reading (January 2025)..

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(II) Venue-Specific: Focuses solely on RWB, not broader community input across St. Pete Beach relevant to the city-wide ordinance.

(III) Incomplete Scope: While it's feedback, it's not a comprehensive record of all community input for Ordinance 2025-02, limiting its fit.

(c) Other Notes:

(i) Comparison to 2.1: 2.2 (16 pages) expands on DR2.1 (8 pages) with more detail—e.g., complaint maps (slide 8), specific dates (slide 3), and ordinance critique (slide 10)—but both focus on RWB and predate 2025-02.

(ii) Precursor Insight: Highlights noise as a 2023 issue, possibly prompting Ordinance 2025-02, though not directly tied to its first reading.

(4) SPB DOC 2.3: A 16-page slide deck titled *"Red, White & Booze Noise Violations by Kenneth Hysell,"* presented to the St. Pete Beach City Commission on September 11, 2023.

(a) Page 9 (Slide 9): "Property Values"

- (i) Lists data sourced from the Pinellas County Property Appraiser's Office.
- (ii) Shows property values for homes near RWB (5501 Gulf Blvd) - Example: "5485 Gulf Blvd - \$1,200,000 (2023 Market Value)."
- (iii) Lists several nearby properties with values ranging from \$800,000 to \$1,500,000.

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(b) Notes: “Noise from RWB impacts property values and quality of life.”

- (i) Suggests a correlation between RWB’s noise and potential property value depreciation or resident dissatisfaction, though no specific data (e.g., value drops) is provided.
- (ii) This slide follows complaint details (slides 3, 6) and precedes ordinance critique (slide 10), framing noise as a broader community issue.

(c) How Property Values Are Being Used:

- (i) **Community Feedback Narrative:** The inclusion of property values ties noise complaints to economic and quality-of-life concerns, amplifying resident feedback (e.g., slide 6’s “can’t sleep” quotes). It implies noise isn’t just a nuisance but a tangible burden on homeowners near RWB.
- (ii) **Policy Justification:** By linking noise to property values, Hysell likely aimed to persuade the commission that noise issues warrant action (e.g., ordinance updates, slide 14), appealing to financial impacts alongside health or peace concerns.
- (iii) **No Direct Evidence:** The slide lists values but doesn’t quantify depreciation (e.g., “noise reduced value by X%”), making it suggestive rather than conclusive—more rhetorical than analytical.

(d) How It Could Not Be Responsive:

- (i) **Not Direct Feedback on Ordinance:** Dated September 2023, it predates Ordinance 2025-02’s first reading (January 2025) and focuses on RWB, not feedback on the ordinance itself or its drafting process.

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- (ii) **Economic, Not Health:** Document request was for "Community Feedback Records," but page 9 leans economic (property values) rather than health-focused feedback, which might align more with "Economic Impact Assessments" (DR3).
- (iii) **Speculative Link:** Lacks data proving noise lowered values, weakening its fit as substantive feedback versus anecdotal concern.

(e) Other Notes:

- (i) **Comparison to DR2.1: DR2.2** (16 pages) adds property value data (slide 9) not in DR2.1 (8 pages), enhancing the economic angle over DR2.1's simpler complaint focus.
 - (ii) **Purpose Insight:** Page 9 uses property values to bolster the noise complaint case, suggesting a community feedback-economic nexus, though not ordinance-specific.
- (5) **SPB DOC 2.4:** A collection of 25 pages of letters (support and opposition) for Case No. 23034, submitted around the Development Review hearing on December 13, 2023, over a year before Ordinance 2025-02's first reading (January 28, 2025). Feedback on a specific development project, not Ordinance 2025-02. Noise is a recurring concern in opposition letters, tied to the proposed restaurant and music.

(a) Key Points:

- (i) Pages 1-10 (Support Letters): Residents and business owners near 7701 Blind Pass Road support the mixed-use project (hotel, restaurant, condos), praising its economic benefits and design. Noise is rarely mentioned; focus is on revitalization.

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(ii) Pages 11-25 (Opposition Letters)

- (A)** Page 12: Resident writes, “Noise from the restaurant and music will disturb our peace,” citing proximity to homes.
- (B)** Page 15: Another notes, “Outdoor seating and amplified music will ruin our quiet neighborhood.”
- (C)** Page 19: Mentions “noise pollution” affecting sleep and property enjoyment, no specific data.
- (D)** Page 23: Opposes due to “noise levels already an issue in the area,” linking to existing venues.

(b) How It Could Not Be Responsive:

- (i) Not Ordinance-Specific:** Dated December 2023, these letters predate Ordinance 2025-02’s drafting and first reading (January 2025).
- (ii) Project-Focused:** Addresses Case No. 23034’s proposed restaurant/music, not the city-wide noise ordinance or existing venues like RWB (unlike DR2.1, DR2.2). It’s narrow feedback, not comprehensive for Ordinance 2025-02.
- (iii) No Health Data:** Mentions noise impacts (e.g., sleep) but lacks health analysis or metrics, limiting its depth as feedback.

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(c) Other Notes:

- (i) Comparison to DR2.1, DR2.2:** Unlike DR2.1 and DR2.2 (RWB-focused), DR2.3 targets a proposed project (7701 Blind Pass Rd), not an existing venue. It's broader in voices (25 letters) but less ordinance-relevant.
- (ii) Noise Theme:** Reinforces noise as a 2023 concern, possibly a precursor to Ordinance 2025-02, though not directly linked.

(6) SPB DOC 2.5: Case No 23034 Submitted Correspondence.pdf, a 7-page collection of emails and letters related to Case No. 23034, the Development Review application for 7701 Blind Pass Road, St. Pete Beach focusing on the proposed mixed-use project (hotel, restaurant, condos). Noise is a recurring opposition theme. November-December 2023—over a year before Ordinance 2025-02's first reading.

(a) Key Points:

- (i) Page 1:** Email dated November 28, 2023, from a resident supporting the project, no noise mention.
- (ii) Page 2:** Email dated December 4, 2023, opposing, stating, "Noise from outdoor music will disrupt our quiet street."
- (iii) Page 3:** Letter dated December 5, 2023, opposing, notes, "Restaurant noise and traffic will ruin our peace."
- (iv) Page 5:** Email dated December 6, 2023, opposing, mentions, "Amplified music will keep us awake," citing sleep concerns.
- (v) Page 7:** Email dated December 7, 2023, supporting, focuses on economic benefits, no noise reference.

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(b) How It Could Not Be Responsive:

- (i) Not Ordinance-Specific:** From late 2023, it predates Ordinance 2025-02's drafting and first reading (January 2025).
- (ii) Project-Specific:** Focuses on Case No. 23034, not the broader scope of Ordinance 2025-02 or existing venues (e.g., RWB in DR2.1, DR2.2). It's limited to one development.
- (iii) No Depth:** Mentions noise impacts but lacks health data or broader analysis, reducing its fit as comprehensive feedback.

(c) Other Notes: 7 vs. 25 Pages: This 7-page version is shorter than DR2.3's 25-page compilation, focusing on select correspondence rather than a full support/opposition set. It might be a subset or a different upload under the same URL.

(7) SPB DOC 5: "2007 PAG Way Noise Surveys through 07012023.pdf,"

- A compilation of noise survey results for 2007 Pag Way, St. Pete Beach.
- Noise measurements over 15 months, likely tied to a venue near 2007 Pag Way, with dB readings, dates, and some complaint notes.
- No explicit reference to Ordinance 2025-02 or enforcement outcomes (e.g., citations, fines).
- April 2022 to July 2023—precedes Ordinance 2025-02's first reading (January 28, 2025).
-

(a) Key Points:

- (i) Page 1:** Cover page listing dates (April 30, 2022, to July 1, 2023) and address (2007 Pag Way).

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- (ii) Pages 2-3:** April 30, 2022, survey—noise levels (e.g., 65-75 dB) measured at property line, noting music from a nearby venue, no ordinance cited.
- (iii) Pages 4-6:** June 15, 2022, survey—levels up to 80 dB, “excessive noise” noted, enforcement action unclear.
- (iv) Pages 7-9:** August 20, 2022—70-85 dB, resident complaint logged, no violation specified.
- (v) Pages 10-12:** October 5, 2022—75-90 dB, “live music” source, no enforcement outcome.
- (vi) Pages 13-15:** March 10, 2023—60-70 dB, quieter night, no action noted.
- (vii) Pages 16-17:** July 1, 2023—80-95 dB, complaint-driven, “potential violation” mentioned, no ordinance or resolution cited.

(b) How It Could Not Be Responsive:

- (i) Pre-Ordinance Timing:** Spanning April 2022 to July 2023, it ends 18 months before Ordinance 2025-02’s first reading (January 2025).
- (ii) No Enforcement Outcome:** While noise levels and complaints are logged (e.g., 80-95 dB on page 16), there’s no clear record of enforcement actions (e.g., citations, fines, compliance orders) under any ordinance, weakening its fit as an "Enforcement Record."
- (iii) Ordinance Disconnect:** No mention of Ordinance 2025-02 or its decibel standards (assumed stricter, post-2025). These surveys likely relate to the older ordinance, not the one I requested records for.

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(c) Other Notes:

- (i) Comparison to DR2:** Unlike DR2's RWB focus (2023), DR5 targets 2007 Pag Way (2022-2023), suggesting broader noise monitoring, but still pre-2025-02.
- (ii) Enforcement Ambiguity:** High dB readings (e.g., 95 dB, page 16) hint at violations, but no follow-through is documented, limiting its enforcement value.

III. 2nd Round of Documents sent 3/28/2025

These generalized health references do not reflect St. Pete Beach's noise environment or population, reinforcing the absence of tailored health/economic impact studies and supporting an adverse inference.

(8) Agenda Report (January 28, 2025) Prepared By: Becky Vose, City Attorney's Office

(a) Relevance to Claims:

- (i) Health Impacts:** The report asserts a need for noise control to safeguard public health but lacks specific health data or studies to substantiate claims of sleep disturbance, stress-related illnesses, or hearing loss.
- (ii) Property Values:** It suggests that excessive noise may reduce property values, yet provides no economic evidence or studies to support this assertion.
- (iii) Community Feedback:** References resident complaints as a basis for the ordinance but does not include specific feedback, survey data, or complaint logs.
- (iv) Enforcement Needs:** Highlights deficiencies in current standards and proposes a new "plainly audible" standard, but offers no data on past enforcement issues or training readiness.

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(b) Key Quotes and Page Numbers:

- (i) "The City currently has 2 standards for noise enforcement: decibel-based measurement and loud and raucous standard." (Page 2)*
- (ii) "Proposed ordinance prohibits excessive noise that is 'Plainly audible at a distance' as a 3rd alternative enforceable noise standard." (Page 3)*
- (iii) "Objective non-content based standard upheld as constitutional standard by Florida Supreme Court." (Page 3)*

(c) The Agenda Report partially aligns with the Enforcement Needs claim by identifying limitations in existing standards and proposing a new one. However, it fails to provide empirical support for Health Impacts (e.g., no local health studies), Property Values (e.g., no economic data), or Community Feedback (e.g., no detailed resident input). This lack of evidence weakens the ordinance's rational basis under legal scrutiny, such as *Heller v. Doe* (509 U.S. 312), which requires a factual basis for governmental actions. The absence of supporting data supports an adverse inference (*Public Health Trust v. Valcin*, 507 So. 2d 596) that the City lacks the necessary justification for Ordinance 2025-05.

(9) Patrick K. Dooley's Paper: "Enforcing Noise Ordinances in Florida"

(a) Relevance to Claims:

- (i) Health Impacts:** Mentions general noise-related health effects (e.g., sleep interference) but lacks data specific to St. Pete Beach residents.
- (ii) Property Values:** Does not address economic impacts or property values.
- (iii) Community Feedback:** No mention of St. Pete Beach-specific resident input or complaints.
- (iv) Enforcement Needs:** Discusses statewide enforcement challenges, such as lack of training, but does not evaluate St. Pete Beach's enforcement context.

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(b) Key Quotes and Page Numbers:

- (i) *"Most communities in Florida have a noise ordinance or code in one form or another." (Page 1)*
- (ii) *"When a local government chooses to use a performance-based type ordinance, the personnel assigned to the enforcement of the ordinance have very little, or no training in the use of sophisticated measurement equipment." (Page 2)*
- (iii) *"Survey Results from State Attorney's: 100% stated that they received no training in sound measurement." (Page 4)*
- (iv) *"Sleep interference occurs at an average night time sound level of 35db." (Page 5)*

(c) This paper partially supports the Enforcement Needs claim by highlighting training and equipment deficiencies across Florida, suggesting potential challenges for St. Pete Beach. However, its lack of localized data undermines its relevance to Health Impacts (no St. Pete Beach health metrics), Property Values (no economic discussion), and Community Feedback (no local input). The general health reference to sleep interference at 35 dB is insufficient without evidence linking it to St. Pete Beach's noise environment. This gap reinforces the absence of tailored evidence required to justify the ordinance's claims, potentially failing rational basis review (*Heller v. Doe*).

(10)EPA Report: "Information on Levels of Environmental Noise" (1974)

(a) Relevance to Claims:

- (i) Health Impacts:** Provides general noise thresholds for health protection (e.g., sleep and hearing) but is not specific to St. Pete Beach.
- (ii) Property Values:** Does not address economic impacts or property values.
- (iii) Community Feedback:** Lacks community-specific data or feedback from St. Pete Beach.

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(iv) Enforcement Needs: Offers guidance on noise measurement but includes no enforcement data or local applicability.

(b) Key Quotes and Page Numbers:

- (i) "This document has been approved for general availability. It does not constitute a standard, specification, or regulation." (Page 1)*
- (ii) "Taking both the specific language of the Act, cited above, and the legislative history discussed in the foregoing, EPA interprets Section 5(a)(2) as directing the Agency to identify levels based only on health and welfare effects and not on technical feasibility or economic costs." (Page 9)*
- (iii) "Not all of the scientific work that is required for basing such levels of environmental noise on precise objective factors has been completed." (Page 1)*

(c) The EPA report supports the Health Impacts claim with broad noise thresholds, but its 50-year-old, national scope limits its relevance to St. Pete Beach's current conditions. It does not address Property Values, Community Feedback, or Enforcement Needs, and its exclusion of economic and technical feasibility considerations omits critical aspects of ordinance justification (Fla. Stat. § 166.041(4)(a)). The admission of incomplete scientific data further weakens its authority, supporting an adverse inference (Valcin) that the City lacks localized, contemporary evidence to back its claims.

(11) EPA Brochure "The Environmental Frontier: Noise Control"

(a) Relevance to Claims:

- (i) Health Impacts:** Mentions general health effects (e.g., hearing damage, stress) but provides no scientific data or St. Pete Beach-specific evidence.
- (ii) Property Values:** Does not discuss economic impacts or property values.
- (iii) Community Feedback:** References community efforts broadly but lacks St. Pete Beach-specific input.

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(iv) Enforcement Needs: Mentions enforcement programs generally but offers no specific data or local context.

(b) Key Quotes and Page Numbers:

- (i) "If you are interested in learning of specific noise control job opportunities in Federal, state, or local government..." (Page 9)*
- (ii) "Noise is one of the major environmental problems facing our country today" (Page 3)*
- (iii) "It is estimated that at least 20 million Americans are exposed daily to noise that is permanently damaging to their hearing" (Page 3)*

(c) As a recruitment tool from the 1970s, this brochure minimally supports the Health Impacts claim with broad statements, but its lack of scientific backing or local relevance renders it inadequate. It fails to address Property Values, Community Feedback, or Enforcement Needs specific to St. Pete Beach, and its outdated nature (e.g., referencing the Quiet Communities Act of 1978) undermines its applicability to a 2025 ordinance. This document's inclusion suggests a lack of substantive evidence (Valcin), failing to justify the agenda packet's claims.

(12) Noise Ord 2025-05 - with Ex A Markup for first reading

(a) Relevance to Claims:

- (i) Health Impacts:** Asserts noise affects health but lacks empirical studies or local data.
- (ii) Property Values:** Claims noise reduces property values without economic evidence.
- (iii) Community Feedback:** References resident communications but provides no specific data or surveys.

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(iv) Enforcement Needs: Outlines new enforcement methods (e.g., "plainly audible" standard) but lacks data on past enforcement or training readiness.

(b) Key Quotes and Page Numbers:

(i) *"It is the public policy of the city that every person is entitled to noise levels that are not detrimental to the life, health, comfort and peace of the city's residents and visitors..." (Page 1)*

(ii) *"Residents of the city have the right to have peace and quiet in and about their residences, and be free from excessive noise..." (Page 1)*

(iii) *"It is recognized that excessive noise potentially lowers the value of nearby residences." (Page 1)*

(iv) *"The City Commission finds these amendments to assist in the preservation and maintenance of the public health, safety, and welfare." (Page 1)*

(c) The ordinance's "Findings of Fact" address all four claims but rely on general assertions rather than evidence. Health Impacts and Property Values lack supporting studies, Community Feedback is vague without specific records, and Enforcement Needs are proposed without data on current deficiencies or implementation capacity. This anecdotal basis fails to meet rational basis standards (*Heller v. Doe*), supporting an adverse inference (*Valcin*) that the City lacks concrete justification for Ordinance 2025-05.

(13) Noise Ord. Presentation Attorney B. Vose

(a) Relevance to Claims

(i) Health Impacts: "Excessive noise causes sleep disturbance, stress-related illnesses, and hearing loss, necessitating decibel limits to protect residents (pages 5, 7)."

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- The presentation does not directly address health impacts or provide data to support claims of sleep disturbance, stress-related illnesses, or hearing loss. It focuses on the legal and enforcement aspects of the proposed "plainly audible" standard rather than substantiating health-related justifications. There are no references to scientific studies, local health data (e.g., from the Pinellas County Dept. of Health), or recognized standards linking noise to health effects in St. Pete Beach. This omission fails to support the agenda packet's health impact claim, weakening the ordinance's rational basis under *Heller v. Doe* (509 U.S. 312, 1993), which requires evidence to justify governmental actions.

(ii) Community Feedback: "Numerous resident complaints over recent years demand stricter noise controls (pages 4, 9)."

- The presentation does not include specific community feedback, such as resident complaints, surveys, or public hearing records, to demonstrate a city-wide demand for stricter noise controls. It focuses on the proposed standard and enforcement methods without referencing the volume or nature of resident input. Given that much of the complaint data in the broader document set (e.g., SPB DOC 2.1, 2.2) is RWB-specific and from 2023, the presentation's failure to address broader or more recent feedback (e.g., 2024-2025) suggests a disconnect between the ordinance's city-wide scope and the localized nature of documented complaints. This gap fails to support the agenda packet's claim of widespread community demand.

(iii) Enforcement Needs: "The current ordinance lacks measurable standards, hindering enforcement (pages 5, 10)."

Key Quotes and Page Numbers:

- (A)** "The City currently has 2 standards for noise enforcement: i) Decibel based measurement... ii) Loud and raucous standard - 'any sound that, because of its

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volume level, duration and character, annoys, disturbs, injures or endangers the comfort, health, peace or safety of reasonable persons of ordinary sensibilities.'

Potential Defenses: subjective and difficult to enforce." (Page 2)

- (B) "Proposed ordinance prohibits excessive noise that is 'Plainly audible at a distance' as a 3rd alternative enforceable noise standard." (Page 3)
- (C) "Objective non-content based standard upheld as constitutional standard by Florida Supreme Court." (Page 3)
- (D) "No person shall permit, cause, allow, or create excessive noise that is plainly audible in a residential location when that residential location is located no less than two hundred (200) feet from the Originating Location or the closest property line of the Originating Property." (Page 5)
- (E) "Investigating officers shall make a determination as to whether a noise is plainly audible, by using the following standards: (1) officer's ordinary auditory senses... (2) The officer must have a direct line of hearing... (3) The officer need not determine the particular words or phrases being produced..." (Page 7)

The presentation directly addresses the Enforcement Needs claim by critiquing the subjectivity of the current "loud and raucous" standard and proposing the "plainly audible" standard as a more objective alternative. It cites legal precedent (likely State v. Catalano, 104 So. 3d 1069, Fla. 2012, correcting the erroneous State v. Ewing citation in other documents) to argue the standard's constitutionality.

However, the "plainly audible" standard itself relies on subjective officer discretion, as noted: "the officer need not determine the particular words or phrases" (Page 7), which could lead to inconsistent enforcement. The presentation also lacks data on past enforcement failures (e.g., citation rates, outcomes) or officer training readiness, undermining its claim of improved enforceability (Siegmeister v. Johnson, 240 So. 3d 70, Fla. 1st DCA 2018). This gap supports an

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adverse inference (Public Health Trust v. Valcin, 507 So. 2d 596, Fla. 1987) that the City lacks evidence of practical enforcement capacity.

(iv) Overbreadth Risk: The ordinance's city-wide, 24/7 application risks overbreadth by applying a uniform standard to diverse areas (e.g., commercial zones like Corey Ave vs. residential zones) without evidence of a city-wide noise problem. The RWB-centric complaint data from 2023 suggests the issue may be venue-specific rather than pervasive, yet the ordinance imposes restrictions on all noise sources, potentially impacting protected activities like live music or outdoor events in commercial areas. This broad scope may disproportionately burden businesses and residents in areas without documented noise issues, violating overbreadth principles (Ashley v. City of Jacksonville). The presentation's failure to address this risk or provide a legal analysis of overbreadth (e.g., First Amendment implications for expressive activities) supports an adverse inference (Valcin) that the City has not evaluated these constitutional concerns.

(v) Lack of Tailoring: The presentation acknowledges the potential for tailoring (e.g., time or location-based restrictions, Page 10) but does not justify the chosen city-wide approach. Under Heller v. Doe, the ordinance must be tailored to avoid undue burdens. The RWB-focused data suggests a narrower solution (e.g., targeted enforcement against RWB) could address the documented issue without a city-wide ordinance, further highlighting the overbreadth risk.

(b) The presentation's lack of legal analysis on overbreadth, combined with the RWB-focused data, supports an adverse inference (Valcin) that the City has not adequately evaluated the ordinance's constitutional risks. This omission could render Ordinance

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2025-05 vulnerable to legal challenges, particularly from businesses in commercial zones where noise (e.g., music, events) is integral to operations.

- (c)** This analysis suggests that Ordinance 2025-05, as presented, may be an overbroad response to a localized issue (RWB complaints, but for only 2023), lacking the city-wide evidence needed to justify its scope.
- (d)** The presentation focuses on Enforcement Needs by introducing the "plainly audible" standard, citing legal precedent (State v. Catalano), but its subjectivity and lack of enforcement readiness data (e.g., training protocols) undermine its practicality (Siegmeister v. Johnson). It does not address Health Impacts, Property Values, or Community Feedback with evidence, leaving these claims unsupported. The absence of implementation details supports an adverse inference (Valcin) that the City is unprepared to enforce the ordinance effectively.

(14) Business Impact Estimate (BIS) - Analysis of St. Pete Beach's Business Impact Estimate (BIE) for Proposed Noise Control Ordinance

The City of St. Pete Beach has provided a BIE for its proposed noise control ordinance, which aims to regulate excessive noise audible at specified distances in residential areas. While the BIE technically addresses each statutory requirement, it does so in a minimal and vague manner.

(a) Analysis of the BIE

- (i) Summary of the Proposed Ordinance:** The BIE for St. Pete Beach's noise control ordinance partially complies with Florida Statute § 166.041(4)(a):
- (ii) Compliant Elements:** Summary, identification of new charges/fees, number of businesses impacted, and additional information sections meet basic requirements.

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(iii) Non-Compliant Elements: Estimates of compliance and regulatory costs lack quantification, failing to fulfill the statute's intent and exposing the ordinance to legal risk.

(A) Estimate of Direct Compliance Costs

- 1. Statutory Requirement:** An estimate of costs businesses may reasonably incur to comply (§ 166.041(4)(a)2.a).
- 2. BIE Content:** The BIE notes that compliance costs "will be based on a variety of factors," ranging from "lowering the volume of noise" to "expenses related to having an acoustical expert design measures." No specific figures, ranges, or methodologies are provided.
- 3. Evaluation:**
 - The term "estimate" implies some quantification. While exact dollar amounts may not be mandatory, the statute's intent—to inform businesses of financial burdens—requires more than vague descriptions.
 - Florida courts emphasize transparency in municipal actions. In *City of Miami Beach v. Fleetwood Hotel, Inc.*, 261 So. 2d 801 (Fla. 1972), an ordinance was invalidated for insufficient clarity, a principle applicable to the BIE's role in providing actionable data.
 - The absence of cost estimates (e.g., average expenses for soundproofing or expert consultations) limits the BIE's utility.
- 4. Conclusion:** Non-compliant due to lack of quantification.

(B) Estimate of Municipality's Regulatory Costs

- 1. Statutory Requirement:** An estimate of the municipality's enforcement costs, including revenues from new charges or fees (§ 166.041(4)(a)2.c).

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2. BIE Content: The BIE asserts that regulatory costs will not increase "unless there is an uptick in noise violations," with no new fees beyond fines. It offers no cost projections for potential enforcement increases.

3. Evaluation:

- The statute requires an "estimate," implying a projection of potential costs. A conditional statement without data (e.g., historical violation rates or enforcement expenses) is insufficient.
- State v. City of Sunrise, 354 So. 2d 1206 (Fla. 1978), underscores the need for good faith estimates in municipal planning, a standard this BIE does not meet.

4. Conclusion: Non-compliant due to lack of a quantified estimate.

(b) The city therefore has yet to address these deficiencies:

- (i) Unquantified Costs:** No specific estimates (e.g., average cost of noise mitigation per business, ranges for expert services).
- (ii) Limited Scope:** Did not Include all potentially affected businesses (e.g., restaurants, event venues, construction firms).
- (iii) Lack of Detail in Regulatory Costs:** No Estimates for enforcement expenses (e.g., staffing, equipment) and potential fine revenues, using historical data or projections.
- (iv) No Analysis:** Lack of risk and sensitivity analyses to enhance the BIE's utility, even if not strictly required.
- (v)** Without these revisions, the BIE remains substantively deficient, providing little actionable information for businesses and risking legal challenge under Florida precedent.

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- (c) The BIE indirectly relates to Enforcement Needs by noting potential regulatory costs, but its vague cost estimates and focus solely on bars (excluding other businesses) fail to meet Fla. Stat. § 166.041(4)(a) requirements for a detailed economic analysis. It does not address Health Impacts, Property Values, or Community Feedback, and its incomplete scope supports an adverse inference (Valcin) that the City has not fully assessed the ordinance's economic impact, weakening its justification.

(15) Noise Science Health Effects Bibliography

(a) Relevance to Claims:

- (i) Health Impacts:** Lists general health effects (e.g., sleep interference, stress) but lacks St. Pete Beach-specific data.
- (ii) Property Values:** Does not address economic impacts.
- (iii) Community Feedback:** No local feedback included.
- (iv) Enforcement Needs:** No enforcement data or discussion.

(b) Key Quotes and Page Numbers:

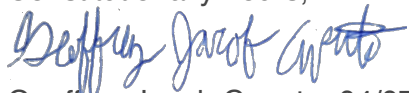
- (i)** "Exposure to loud sounds puts millions of people in the United States and across the globe at risk" (Page 1)
- (ii)** "Sleep interference occurs at an average night time sound level of 35db." (Page 5)
- (iii)** "Unregulated noise has been proven to have serious adverse effects on people far beyond simple annoyance." (Page 5)

- (c)** The bibliography supports the Health Impacts claim with general references but fails to connect these to St. Pete Beach or the ordinance's "plainly audible" standard. Its reliance on outdated sources (e.g., 1974 EPA report) and lack of local data undermine its relevance (Heller v. Doe). It does not address Property Values, Community

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Feedback, or Enforcement Needs, and its broad scope supports an adverse inference (Valcin) that the City lacks current, localized evidence to justify Ordinance 2025-05.

Constitutionally Yours,



Geoffrey Jacob Caputo, 04/07/2025

Geoffrey Jacob Caputo

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floridarepublic@gmail.com

(813) 968-9300

March 28, 2025

**NOTE: THIS IS A DRAFT ONLY, AND
SERVES THE FUNCTION OF A “NOTICE
OF INTENT FOR MEDIATION”.**

**- AT THIS TIME , THERE IS NO PENDING
MEDIATORY ACTION FILED.**

- SUBJECT TO CHANGE WITH NOTICE

[Mediator's Name/Title]

Florida Attorney General's Mediation Programß

[Address]

[City, State, ZIP]

**RE: URGENT MEDIATION REQUEST - CITY OF ST. PETE BEACH'S
VIOLATIONS OF PUBLIC RECORDS LAW (PRR2025-22)**

Greetings [Mediator's Name],

This mediation petition seeks resolution of the City of St. Pete Beach’s violations of Florida’s Public Records Law in response to my Public Records Request PRR2025-22, submitted on February 2, 2025. The City’s delayed, incomplete, and selective responses—particularly their failure to address document categories DR3, DR4, and DR6 or complete the requested tally sheet—constitute an administrative default under common law principles, as no statutory remedy exists to compel the City to admit document non-existence. I request that you, as mediator, formally recognize this default or, alternatively, direct the City to clarify the status of the requested documents to remedy specific violations of Chapter 119, Florida Statutes.

I. FACTUAL TIMELINE & PROCEDURAL HISTORY

Key Parties:

Requester: Geoffrey Jacob Caputo (Undersigned)

Respondents:

Amber LaRowe, City Clerk

Adrian Petrila, Mayor

City Commissioners (Marriott, Robinson, Rzewnicki, Moholland)

Ralf Brooks, Interim City Attorney

CHRONOLOGY OF EVENTS:

- (1) Jan 23, 2025 (Exhibit A):** Gretchen Vose issued an opinion justifying Ordinance 2025-05 under the "plainly audible" standard.

- (2) January 28, 2025 (Exhibit B):** The City published an agenda packet for Ordinance 2025-05's first reading, pages 220, 223, asserting six justifications: (1) noise-related health impacts, (2) community quality-of-life complaints, (3) declining property values, (4) legal defensibility, (5) enforcement necessity, and (6) business impact compliance. Note: My request emphasized the need for a tally of existent and non-existent records ("zeros") to substantiate these claims within a reasonable time, even forgoing a cost estimate for expediency.

- (3) February 2, 2025 (Original Document Request - Exhibit C / USPS 70202450000103009908):**
Undersigned submitted PRR2025-22 via USPS Certified Mail to City Clerk LaRowe, Mayor, Commissioners, and City Attorney (all served parties copied hereafter; tracking numbers available). The request sought six document categories (DR1–DR6)—health impact studies, community feedback, economic impact assessments, legal memos,

enforcement records, and a Business Impact Estimate (BIE) per Fla. Stat. § 166.041(4)(a) —with a tally sheet (Exhibit A, p. 8) for marking existence ("yes" or "no"), non-existence ("zeros"), and exemptions (2021–2025), plus an affidavit in negative averment denying DR1–DR6's existence unless proven (Exhibit B).

(4) **February 5, 2025:** The City received PRR2025-22, initiating a 41-day response period (Exhibit C).

(5) **March 8, 2025 (Notice of Fault (NOF) - Exhibit D / USPS 70202450000102775118):** After no response within 30 days, Undersigned issued a Notice of Fault (NOF), alleging non-compliance for failing to address the request, including the tally sheet's columns (Exhibit p. 8/Ex.C).

(6) **March 10, 2025:** NOF received by Clerk.

(7) **March 11, 2025 (1st Instance of "Reactive Compliance" - Exhibit E/1-7):** One day after receipt of NOF, The City provided a partial response via JustFOIA (7 documents—DR1, DR2.1–.4, DR5; see SPB_DOCS_SUMMARY), addressing only DR1, DR2, and DR5 with limited scope, omitting DR3, DR4, and DR6, and failing to complete the tally sheet despite 41 days. Clerk LaRowe claimed it was "complete," yet provided no exemptions or "zeros."

(8) **March 13, 2025 (Thank You Letter 1 - Exhibit F/1-2 / USPS 9589071052700028534041):** Undersigned sent a Thank You Letter, noting deficiencies in DR1, DR2, and DR5, the absence of DR3, DR4, and DR6, and no "zeros" on the tally sheet, setting a March 18 deadline (extendable to April 15). Revised tally table included (E2).

(9) March 28, 2025 (Notice of Default (ADACL) Exhibit G 1-4 / USPS

70202450000102775804): Undersigned sent a Verified Notice of Administrative Default at Common Law (ADACL) with Finding of Fact in Administrative Record (FFAR)/Conclusions at Law (CLAR), Memoranda in Support of ADACL, and the incomplete tally table, asserting persistent failure. As of 3/28, nearly two months after submission, DR3 and DR4 were unaddressed, DR1, DR2, DR5, and DR6 were partial, with no exemptions, redactions, or "zeros" marked. FFAR was notarized, reserving common law tacit acquiescence rights.

(10) March 28, 2025 (A.M.): Undersigned filmed a Facebook video ("FB Blast") at the post office, posted on St. Pete Beach boards, describing the City's default.

(11) March 28, 2025, 3:41 PM (2nd Instance of "Reactive Compliance" - Exhibit H1-8):

Hours after FB Blast and nearly 1000 views, Deputy Clerk Ariana Wilson emailed eight "Additional Records" (see SPB_DOCS_SUMMARY, Exhibit I), lacking specificity or correlation to DR1–DR6 or the tally table, with partial responses failing to link local, recent studies to noise effects, property values, or quantified BIE figures. Updated tally table reflects 3/11 and 3/28 documents.

II. Adverse Inferences Resulting from City's Opacity

(1) Procedural Violations:

(a) The City's 21-business-day delay (February 5 to March 11, 2025) exceeds the 10-business-day/2-week precedent in *Executive Office of the Governor v. Florida Center for Government Accountability, Inc.* (1D2022-3507, 1st DCA) and *Siegmeister v. Johnson* (240 So. 3d 70, Fla. 1st DCA 2018), even for a tally of existent/non-existent, exempt, or redacted records.

- (b) Post-NOF, the March 11 reactive response omitted DR3, DR4, and DR6, constituting ongoing non-compliance under *Consumer Rights, LLC v. Bradford County* (153 So. 3d 394, Fla. 1st DCA 2014), which demands good-faith responses.
- (c) Failing to provide the tally sheet with "zeros" should be construed to be in violation of Fla. Stat. § 119.07(1)(c)'s good-faith requirement, by obscuring document status.

(2) Material Selectivity / Strategic Evasion: The selective response—providing less critical documents while withholding DR3, DR4, and DR6 without exemptions or "zeros"—suggests evasion. *Public Health Trust of Dade County v. Valcin* (507 So. 2d 596, Fla. 1987) allows adverse inferences when material evidence is withheld, implying these records don't exist or contradict City claims.

(3) Reactive Compliance: Responses on March 11 (post-NOF) and March 28 (day of ADACL) followed pressure, not good faith, despite the tally sheet's framework. This persists despite unsubstantiated city-wide claims in the January 28, 2025, agenda packet (Exhibit A).

III. Why It's Important for Government Entities to Clearly State Document Non-Existence

Government entities must clearly delineate whether documents exist, are in their custody, or are non-existent to uphold public records laws and governance principles. The City's refusal to do so for DR3, DR4, and DR6, despite my tally sheet, justifies mediation action and aligns with established legal norms, not a rogue theory.

(1) Transparency and Public Trust: Transparency ensures accountability, a cornerstone of Florida's constitutional right to access records (*Fla. Stat. § 119.01*). The City's ambiguity—

failing to mark "zeros" or confirm status—suggests concealment, eroding trust, especially on Ordinance 2025-05's impact.

(2) Legal Compliance and Procedural Fairness:

(a) Fla. Stat. § 119.07(1)(e) requires exemption bases with statutory citations; § 119.07(1)(f) mandates written reasons if requested. Florida courts construe such statutes liberally to favor openness: “It is well settled that the Sunshine Law, enacted for the public benefit, should be liberally construed to give effect to its public purpose” (*Zorc v. City of Vero Beach*, 722 So. 2d 891, 893, Fla. 4th DCA 1998), citing *Doran*, 224 So. 2d 693, Fla. 1969). This extends to Chapter 119, where admitting document non-existence via "zeros" on my tally sheet is a good-faith duty under § 119.07(1)(c) (*Krause v. Reno*, 366 So. 2d 1244, 1252, Fla. 3d DCA 1979: “Statutes enacted for the public benefit should be interpreted most favorably to the public,” quoting *Doran* at 699)).

(b) Federal FOIA precedent Federal FOIA precedent reinforces this duty:

- (i) *Oglesby v. United States Dep’t of the Army* (920 F.2d 57, D.C. Cir. 1990): “When an agency informs a requester that no records have been found, it must explicitly advise him that he may appeal the adequacy of the search conducted” (at 66).
- (ii) *Ruotolo v. Department of Justice, Tax Division* (28 F.3d 6, 2d Cir. 1994): “The letter concludes by advising the Ruotolos that the information sought ‘is not retrievable by means of the Tax Division’s indices’” (at 6), a quasi-"no record" response lacking appeal notice.
- (iii) These norms confirm clarity on non-existence is standard, not fringe, aligning with my request. The City’s silence therefore violates § 119.07(1)(c)’s good-faith standard.

(3) **Efficiency for All Parties:** Clarity lets me appeal or adjust my request, avoiding mediation. For the City, it reduces disputes, as federal FOIA guidance notes (FOIA Guide, 2004 Edition). Their vagueness has prolonged this process unnecessarily.

(4) **Preventing Misinformation:** Unclear responses fuel perceptions of cover-ups, amplified by my “FB Blast” (March 28, 2025). Clear statements could dispel confusion, aligning with Florida’s transparency mandate.

IV. Why the Mediator Should Formally Recognize an Administrative Default by the City of St. Pete Beach

The City’s failure establishes an administrative default under common law, as detailed in the Memoranda of Law in Support of ADACL (attached). This is of necessity due to no statutory or judicial remedy for government entity admitted document non-existence.

(1) Common Law Fills Statutory Gaps (Fla. Stat. § 2.01)

(a) **No Mandamus Remedy:** Florida Jurisprudence limits mandamus to production/ exemptions, not non-existence admissions. (*Weeks v. Golden*, 764 So. 2d 633, Fla. 1st DCA 2000; *Chandler v. City of Greenacres*, 140 So. 3d 1080, Fla. 4th DCA 2014; *Moeller v. Southeast Florida Behavioral Health Network, Inc.*, 392 So. 3d 579, Fla. 4th DCA 2024; *Town of Manalapan v. Rechler*, 674 So. 2d 789, Fla. 4th DCA 1996).

(b) **No Statutory Compulsion:** Fla. Stat. § 119.07(1)(c) requires good-faith responses but lacks provisions for preemptive tallies or "zeros" prior to cost estimates/production, leaving a gap. Florida courts correlate the term “good faith” in §119 cases with agency delays. (*Consumer Rights, LLC v. Bradford County*, 153 So.3d 394 (2014), *Promenade*

D'Iberville, LLC v. Sundy, 145 So.3d 980 (2014))

- (i) **§ 119.07(1)(a)**: Mandates reasonable access but not status clarification.
- (ii) **§ 119.07(1)(d)**: Requires redacting exempt portions, not withholding categories.
- (iii) **§ 119.07(1)(e)–(f)**: Demands exemption details, unmet for DR3, DR4, and DR6 after 32 days (*Chronology 4–5*).

(2) Common Law Principles Apply

- (a) Fla. Stat. § 2.01 incorporates *qui tacet consentire videtur*. *State v. Ashley* (701 So. 2d 338, Fla. 1997) confirms common law persists unless abrogated; Chapter 119 poses no barrier.
- (b) *Vacation Ventures v. Holiday Promotions* (687 So. 2d 286, Fla. 5th DCA 1997) shifts the burden via silence, applicable here.
- (c) Statutory silence preserves common law (*Thornber v. City of Fort Walton Beach*, 568 So. 2d 914, Fla. 1990; *Irven v. Dep’t of Health & Rehab. Servs.*, 790 So. 2d 403, Fla. 2001)).

(3) Administrative Default via Tacit Acquiescence

- (1) **FAC R. 28-106.111(4)**: Non-response waives objections, paralleling ADACL.
- (2) **FAC R. 12-6.003(3)**: Tax defaults finalize matters for non-response.
- (3) ***Dep’t of Revenue v. Vanjaria Enters., Inc.* (675 So. 2d 252, Fla. 5th DCA 1996)** and ***Florida Dep’t of Revenue v. New Sea Escape Cruises, Ltd.* (894 So. 2d 954, Fla. 2005)** uphold defaults in administrative non-judicial cases.

(4) Mediator's Ministerial Duty

(a) FAC R. 61B-80.002 and Fla. Stat. § 44.102(3) require documenting § 119.07(1) violations and facilitating resolution. Recognizing the City's default via silence (*qui tacet*) aligns with this.

(i) Violation of § 119.07(1)(c) - Failure to Respond in Good Faith and Promptly

(A) The City received *PRR2025-22* on February 5, 2025, but didn't respond until March 11, 2025 (36 days, or 21 business days), exceeding the 10-business-day/2-week precedent for reasonable response time (*Siegmeister v. Johnson*, 240 So. 3d 70, Fla. 1st DCA 2018).

(B) The "reactive compliance" (Mar. 11 & 28) from the Clerk following the pressure from NOF and ADACL does not likely comport with generally accepted conventions of good faith.

(C) The partial response omitted DR3, DR4, and DR6, and failed to address the tally sheet's "zeros" for non-existence, suggesting a lack of good faith by obscuring document status.

(D) Even after the *Notice of Fault* (March 8, received March 10), the March 11 response was incomplete, and the March 28 response (post-ADACL) remained deficient.

(ii) Violation of § 119.07(1)(e) - Failure to State Statutory Basis for Withholding

(A) The City provided no records for DR3 (economic impact assessments), DR4 (legal memos), and DR6 (Business Impact Estimate) by March 28, 2025, nor did they cite any exemptions for withholding them, despite 41 days since receipt.

(B) The tally sheet requested exemptions be marked, but the City ignored this, leaving ambiguity about whether these records exist or are exempt.

(iii) Violation of § 119.07(1)(f) - Failure to Provide Written Reasons for Denial Upon Request

(A) PRR2025-22 (February 2, 2025) implicitly requested clarity via the tally sheet's columns for exemptions and non-existence, yet the City's responses (March 11 and March 28) provided no written reasons for omitting DR3, DR4, and DR6.

(B) Clerk LaRowe's claim of "complete" on March 11 didn't explain the omissions, nor did Deputy Clerk Wilson's March 28 email specify reasons.

(iv) Violation of § 119.07(1)(a) - Failure to Provide Access at a Reasonable Time

(A) The 21-business-day delay (February 5 to March 11) and incomplete responses (omitting DR3, DR4, DR6) prevented access within a reasonable time.

(B) The City's failure to complete the tally sheet or provide all requested records by March 28, 2025 (41 days total), further delayed access, despite willingness of undersigned to forgo a cost estimate in favor of just the tally for expediency.

(v) Violation of § 119.01(1) - General Policy of Openness Not Upheld

(A) The City's pattern of delay, omission (DR3, DR4, DR6), and refusal to mark "zeros" or exemptions contravenes Florida's broad transparency policy.

(B) This opacity undermines your ability to verify Ordinance 2025-05's basis, conflicting with the statutory duty to provide access.

(b) Elliott v. Aurora Loan Servs. (unreported) supports un rebutted affidavits (Verified FFAR) as facts the City hasn't contested.

(5) Consequences of Default: The City's non-response to DR3, DR4, and inadequate responses to DR1, DR2, DR5, and DR6 admit:

- | | |
|--|---|
| (a) No city-wide health crisis (DR1). | (d) No comprehensive legal foundation (DR4). |
| (b) No broad community consensus (DR2). | |
| (c) No economic data linking noise to property values (DR3). | (e) No pervasive enforcement need (DR5). |
| | (f) An unquantified BIE per Fla. Stat. § 166.041(4)(a) (DR6). |

These undermine the January 28, 2025, agenda packet, rendering Ordinance 2025-05 deficient as the City plans an April 22, 2025, workshop.

V. RELIEF SOUGHT

I request that the mediator, pursuant to Fla. Stat. § 44.102(3) and FAC R. 61B-80.002, address the City's violations of Chapter 119, Florida Statutes, as follows:

(1) Recognize the City's Administrative Default: Formally note the City's tacit admission, via common law (*qui tacet consentire videtur* - Fla. Stat. § 2.01), partial fulfillment, reactive compliance, procedural delays, and strategic withholding, and that documents DR3, DR4, and portions of DR1, DR2, DR5, and DR6 - their subclasses in the original request and tally table - do not exist or do contradict their position on Ordinance 2025-05, due to:

(a) § 119.07(1)(c): Failure to respond promptly (21 business days vs. 10-day precedent) and in good faith, omitting DR3, DR4, and DR6 without tally sheet "zeros" after 41 days.

- (b) § 119.07(1)(e):** Failure to state statutory exemptions for withholding DR3, DR4, and DR6, despite my tally sheet request.
- (c) § 119.07(1)(f):** Failure to provide written reasons for omitting DR3, DR4, and DR6, despite my implied request via the tally sheet.
- (d) § 119.07(1)(a):** Failure to provide access within a reasonable time, delaying full response beyond 41 days.
- (e) § 119.01(1):** Failure to uphold Florida's openness policy by obscuring document status, undermining public trust.

(2) Alternatively, Direct Clarification to Remedy Violations:

- (a)** Request that the City comply with § 119.07(1)(a), (c), (e), (f) and § 119.01(1) by:
 - (i)** Completing the tally sheet (Exhibit B) with "zeros" for non-existent documents or providing a written index confirming the status of each DR1–DR6 category and subclasses (e.g., DR3c), noting exemptions or redactions, to address the good-faith promptness (§ 119.07(1)(c)), exemption disclosure (§ 119.07(1)(e)), written reasons (§ 119.07(1)(f)), reasonable access (§ 119.07(1)(a)), and openness policy (§ 119.01(1)) violations.
 - (ii)** Request of the City to explain in writing the delay and gaps, facilitating a resolution per Fla. Stat. § 44.102(3)'s mandate to foster voluntary agreements.
- (b)** Document these statutory breaches under FAC R. 61B-80.002 to facilitate resolution, ensuring transparency per Fla. Stat. § 44.102(3).

VI. CONCLUSION

The City's refusal to confirm document status obstructs my ability to verify Ordinance 2025-05's basis, violating Fla. Stat. § 119.07(1)(a), (c), (e), (f) and § 119.01(1), and undermining transparency and public trust. The 2nd DCA in *Times Publishing Co. v. Williams*, 222 So. 2d 470, 473 (Fla. 2d DCA 1969), held, "The public has a right to know what their

officials are doing, and this right exists to prevent the kind of governmental action which breeds distrust”—a principle still resonant despite partial disapproval on other grounds by *Neu v. Miami Herald Publishing Co.*, 462 So. 2d 821 (Fla. 1985). Florida courts further affirm: “Mere showing that the government in the sunshine law has been violated constitutes an irreparable public injury” (*Zorc v. City of Vero Beach*, 722 So. 2d 891, 893, Fla. 4th DCA 1998), quoting *Gradison*, 296 So. 2d 477), and “Statutes enacted for the public benefit should be interpreted most favorably to the public” (*Krause v. Reno*, 366 So. 2d 1244, 1252, Fla. 3d DCA 1979), quoting *Doran*, 224 So. 2d at 699). Recognizing the City’s default or directing clarification upholds Chapter 119 and resolves this dispute.

Constitutionally Yours,



Geoffrey Jacob Caputo

Attachments:

Exhibits A–H

Memoranda of Law in Support of ADACL

**Administrative Default at Common Law:
A Novel Approach to Florida Public Records Requests
By Geoffrey Jacob Caputo ©2025 All Rights Reserved**

Enforcement in Florida

Abstract

This Article explores the "Administrative Default at Common Law" (ADACL) process as an innovative response to enforcement challenges within Florida's Public Records Act (Chapter 119, Florida Statutes). By invoking the common law principle of tacit acquiescence, ADACL seeks to address gaps in statutory remedies where government agencies provide partial responses or fail to acknowledge the non-existence of requested records. This Article critically assesses whether ADACL represents a legitimate extension of Florida's common law tradition or an unwarranted bypass of established statutory mechanisms. Through an analysis grounded in administrative law, evidentiary principles, and statutory interpretation, it evaluates ADACL's theoretical foundations, procedural framework, and practical viability. While ADACL offers a creative solution to strategic non-compliance, its judicial acceptance and enforceability remain uncertain, raising significant questions about its role in Florida's public records regime.

I. INTRODUCTION

Florida's Public Records Act stands as a cornerstone of governmental transparency, mandating that public records "shall be open for inspection and copying by any person" under reasonable conditions. See Fla. Stat. § 119.07(1)(a) (2023). Backed by judicial enforcement mechanisms, such as mandamus, the Act has been lauded for its breadth and accessibility. Yet, a persistent enforcement gap emerges when agencies strategically provide incomplete responses, neither fully complying nor explicitly denying the existence of withheld records. This ambiguity frustrates requestors, leaving them without clear recourse under existing statutory remedies.

**Administrative Default at Common Law:
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The Administrative Default at Common Law (ADACL) process, exemplified in a St. Pete Beach records request (PRR2025-22), proposes a novel solution by applying the common law maxim *qui tacet consentire videtur* (“he who is silent appears to consent”) to administrative proceedings. Through a structured three-stage framework, ADACL culminates in a formal declaration of default, aiming to compel agency accountability. This approach, however, sparks debate: *Does it enhance Florida’s transparency framework, or does it overstep into territory reserved for statutory and judicial remedies?*

Any member of the Florida Bar is invited to undertake this analysis to evaluate ADACL’s legal foundations, procedural mechanics, and practical implications. This Article integrates a critical examination of its weaknesses—both inherent and additional—while exploring mediation-level and judicial remedies as potential complements or alternatives. In doing so, it contributes to the scholarly discourse on administrative innovation and public records enforcement in Florida.

II. FLORIDA’S PUBLIC RECORDS FRAMEWORK AND ENFORCEMENT GAPS

Florida’s Public Records Act imposes a clear duty on agencies to provide prompt access to public records. See *Fla. Stat. § 119.07(1)(a)*. The Florida Supreme Court has interpreted this obligation stringently, permitting only minimal delays for retrieval and lawful redaction. *Tribune Co. v. Cannella*, 458 So. 2d 1075, 1078 (Fla. 1984). Non-compliance typically triggers mandamus, compelling production or justification of exemptions. *Id.* Yet, this remedy falters when agencies offer partial responses without addressing the existence of all requested records, creating a limbo that undermines transparency.

This gap is particularly acute in requests for records substantiating governmental actions—such as ordinances or regulatory decisions—where the absence of documentation could reveal procedural irregularities. Requestors must then choose between pursuing

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mandamus for potentially non-existent records or accepting incomplete compliance, a dilemma that highlights the limits of Chapter 119's enforcement mechanisms.

III. ADACL'S THEORETICAL FOUNDATIONS

1. Common Law Incorporation

ADACL draws legitimacy from Florida's adoption of English common law under *Fla. Stat. § 2.01*, which preserves doctrines "*of a general and not a local nature*" unless displaced by statute or constitution. *See State v. Ashley, 701 So. 2d 338, 341 (Fla. 1997)*. Absent explicit abrogation by Chapter 119, ADACL proponents assert that common law principles supplement statutory remedies, a view supported by scholarly consensus that statutes typically build upon, rather than supplant, common law foundations. *See David Horton, Statutory Interpretation and the Common Law, 92 S. Cal. L. Rev. 1, 15 (2018)*.

2. Tacit Acquiescence Doctrine

At ADACL's core lies *qui tacet consentire videtur*, a maxim recognizing silence as consent when a response is expected. Florida courts have applied this doctrine in varied contexts, from shifting burdens of proof (*Vacation Ventures v. Holiday Promotions, 687 So. 2d 315, 317 (Fla. 5th DCA 1997)*) to inferring contractual assent (*Horowitz v. Laske, 855 So. 2d 169, 172 (Fla. 5th DCA 2003)*). ADACL extends this principle to administrative silence, positing that an agency's failure to address specific requests equates to an admission of non-existence or inconsistency with public claims.

3. Adverse Inference Principle

ADACL also leverages the adverse inference rule, allowing negative conclusions from a party's failure to produce evidence within its control. *Public Health Trust v. Valcin, 507 So. 2d*

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596, 599 (*Fla. 1987*). While traditionally a litigation tool, this principle finds administrative parallels, such as tax estimations under *Fla. Stat. § 212.12(5)*. ADACL adapts this concept, using sworn findings to establish a record of non-compliance that courts might accept as unrebutted fact. See *Nard, Inc. v. DeVito Contracting*, 769 So. 2d 1138, 1140 (*Fla. 4th DCA 2000*).

IV. ADACL'S PROCEDURAL FRAMEWORK

ADACL's three-stage process, as observed in PRR2025-22, includes:

1. Initial Request and Documentation

A detailed request with a tally sheet delineates document categories, setting expectations for comprehensive responses, including acknowledgment of non-existence.

2. Notice of Fault

A formal notice identifies deficiencies, affording agencies an opportunity to rectify non-compliance, consistent with administrative due process.

3. Declaration of Default

A sworn declaration, structured in 'negative averment' format, documents persistent non-compliance, categorizing responses and articulating legal consequences, such as evidentiary presumptions. This affidavit initiates the '*Cascade of Absence*,' a process by which the agency's silence is treated as a default admission of document non-existence.

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V. CRITICAL EVALUATION: STRENGTHS AND WEAKNESSES

1. Strengths

- a. **Addressing Statutory Gaps:** ADACL targets a niche vulnerability in Chapter 119—strategic silence on document non-existence—enhancing transparency without supplanting mandamus.
- b. **Structured Documentation:** The multi-stage process builds a robust record, bolstering subsequent judicial actions by evidencing agency evasion.
- c. **Common Law Legitimacy:** Grounded in established doctrines, ADACL aligns with Florida’s legal tradition, lending it theoretical credibility.

2. Initial Weaknesses

- a. **Partial Response Challenge:** Partial compliance (e.g., PRR2025-22’s responses to DR1, DR2, DR5) muddies the “silence as consent” premise, as courts may interpret it as good-faith effort rather than evasion.

Remedy: Focus on documenting patterns of selective withholding to demonstrate strategic evasion rather than good-faith compliance.

- b. **Judicial Reception Without Precedent:** Lacking direct precedent, ADACL risks rejection in favor of Chapter 119’s familiar remedies, a hurdle for novel theories. See Lawrence Solum, Legal Theory and Judicial Restraint, 105 Geo. L.J. 123, 145 (2016).

Remedy: Position ADACL as a complementary tool to existing remedies, emphasizing its role in creating an evidentiary record.

- c. **Perceived Redundancy:** Critics may view ADACL as duplicative of mandamus, questioning its necessity given existing statutory tools.

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- d. **Remedy:** Highlight ADACL's unique focus on pre-litigation accountability and its ability to address gaps in Chapter 119.

- e. **Limited Application:** Administrative defaults are typically codified (e.g., tax or licensing), casting doubt on their extension to public records absent legislative sanction
Remedy: Draw parallels to existing administrative default mechanisms in Florida law to establish legitimacy.

- f. **Bad Faith Requirement:** Courts may demand evidence of bad faith beyond mere silence, weakening ADACL's reliance on tacit acquiescence.
Remedy: Emphasize the evidentiary control aspect rather than subjective intent, aligning with Valcin.

- g. **Exhaustion Requirement:** Judicial insistence on exhausting Chapter 119 remedies could render ADACL premature or redundant.
Remedy: Frame ADACL as a preparatory step that complements, rather than circumvents, statutory remedies.

3 . Additional Weaknesses

- a. **Enforceability Concerns:** Without a clear enforcement mechanism, ADACL's declarations may lack practical force, limiting their impact to symbolic gestures.

Remedy: Clarify ADACL's role as an evidentiary tool rather than a standalone enforcement mechanism.

- b. **Jurisdictional Overreach:** ADACL might be seen as usurping judicial functions, risking dismissal for exceeding administrative authority.

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Remedy: Emphasize ADACL's administrative nature and alignment with agency authority.

- c. **Practicality and Accessibility:** Its complexity—requiring notices and affidavits—may deter lay requestors, restricting its utility to legal professionals.

Remedy: Acknowledge complexity but highlight resources like the response guide to aid laypersons.

- d. **Potential for Abuse:** Requestors could exploit ADACL to harass agencies, prompting judicial or legislative backlash.

Remedy: Note procedural safeguards like sworn affidavits and multiple notices to deter misuse.

- e. **Public Policy Tension:** ADACL may clash with Florida's preference for streamlined statutory remedies, undermining its alignment with legislative intent.

Remedy: Align ADACL with Florida's transparency goals and statutory objectives.

VI. MEDIATION-LEVEL AND JUDICIAL REMEDIES

1. Mediation as a Complement

Mediation offers a potential bridge between ADACL and judicial remedies, facilitating resolution without immediate litigation. A mediation-level approach could involve a neutral third party reviewing the Notice of Fault, encouraging agency compliance before default is declared. This step could mitigate the partial response challenge by clarifying intent and reduce the risk of abuse by filtering frivolous claims. However, mediation's voluntary nature limits its enforceability, and resource constraints may hinder its scalability.

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2. Judicial Remedies and Integration

Judicial remedies, primarily extraordinary writs such as prohibition or rational basis injunction, remain the ultimate backstop. ADACL could enhance these by providing a pre-litigation record of non-compliance, strengthening these petitions under Cannella. Yet, the exhaustion requirement poses a hurdle; courts may demand statutory remedies be pursued first, viewing ADACL as an extrajudicial detour. To counter this, ADACL could be positioned as a preparatory step, not a substitute, aligning with judicial economy by resolving disputes pre-trial where possible.

VII. PRACTICAL IMPLICATIONS

1. Transparency Enhancement

If judicially endorsed, ADACL could deter strategic non-compliance, compelling agencies to clarify record status and bolstering oversight of governmental actions.

2. Administrative Burden

While critics highlight added burdens, the tally sheet simplifies responses, balancing transparency gains against administrative costs.

3. Judicial Impact

ADACL might reduce mandamus filings by resolving disputes administratively, though initial litigation testing its validity could temporarily strain courts.

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VIII. RECOMMENDATIONS AND CONCLUSION

ADACL's ingenuity lies in its use of common law to address a modern enforcement gap, yet its weaknesses demand refinement:

- 1. Strengthening Evidence:** Focus on patterns of material withholding to bolster adverse inferences, addressing partial response and bad faith concerns.
- 2. Statutory Alignment:** Present ADACL as an evidentiary tool supporting, not replacing, Chapter 119 remedies, mitigating preemption and exhaustion risks.
- 3. Legislative Codification:** Advocate for statutory amendments to Chapter 119, formalizing consequences for non-acknowledgment and resolving enforceability and jurisdictional issues.

In conclusion, ADACL offers a promising yet imperfect innovation. Its success hinges on judicial willingness to embrace common law solutions and legislative action to address practicality, accessibility, and policy alignment. As Florida's transparency framework evolves, ADACL underscores the enduring relevance of historical principles in tackling contemporary legal challenges.

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**IX. POSTSCRIPT LAW ANALYSIS INCORPORATING CAPUTO'S
ADMINISTRATIVE DEFAULT OF CITY OF ST. PETE BEACH PRR2025-22**

1. THE STRUCTURAL DEFICIENCY IN CHAPTER 119

a. Statutory Silence Exposed

- i. **No Mandamus Remedy:** Florida Jurisprudence limits §119.11 mandamus to production/exemptions, not non-existence admissions. (*Weeks v. Golden*, 764 So. 2d 633, Fla. 1st DCA 2000; *Chandler v. City of Greenacres*, 140 So. 3d 1080, Fla. 4th DCA 2014; *Moeller v. Southeast Florida Behavioral Health Network, Inc.*, 392 So. 3d 579, Fla. 4th DCA 2024; *Town of Manalapan v. Rechler*, 674 So. 2d 789, Fla. 4th DCA 1996).
- ii. **No Statutory Compulsion:** Fla. Stat. § 119.07(1)(c) requires good-faith responses but lacks provisions for preemptive tallies or "zeros" prior to cost estimates/production, leaving a gap. Florida courts correlate and limit the jurisprudence of the term "good faith" in §119 cases to that of agency response time delays. (*Consumer Rights, LLC v. Bradford County*, 153 So.3d 394 (2014), *Promenade D'Iberville, LLC v. Sundy*, 145 So.3d 980 (2014))
 - A. **§ 119.07(1)(a):** Mandates reasonable access but not status clarification.
 - B. **§ 119.07(1)(d):** Requires redacting exempt portions, not withholding whole categories.
 - C. **§ 119.07(1)(e)–(f):** Demands exemption details, unmet for DR3, DR4, and DR6 after 32 days (*Chronology 4–5*)

2. This architecture leaves a procedural chasm: Agencies can sidestep transparency by claiming exemptions for phantom records or issuing vague responses, as the City of St. Pete Beach did with Caputo's PRR2025-22, offering a blank tally sheet after 41 days despite

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Ordinance 2025-05's first reading on January 28, 2025, without a meaningful Business Impact Estimate (BIE).

2. Why It's Important For Government Entities To State Document Non-Existence:

Government entities should clearly delineate whether documents exist, are in their custody, or are non-existent to uphold public records laws and governance principles. The City's refusal to do so for DR3, DR4, and DR6, despite documents to expedite processes such as the tally sheet, justifies mediation action and aligns with established legal norms, not rogue theories.

- a. **Transparency and Public Trust:** Transparency ensures accountability, a cornerstone of Florida's constitutional right to access records (*Fla. Stat. § 119.01*). The City's ambiguity—failing to mark "zeros" or confirm status—suggests concealment, eroding trust, especially on Ordinance 2025-05's impact.
- b. **Why The §119.07(c) good faith standard should Be applied Beyond The Scope of Response Time Delays And Extended Bto document non-existence admissions :**

Florida courts construe such §119 statutes liberally to favor openness: *"It is well settled that the Sunshine Law, enacted for the public benefit, should be liberally construed to give effect to its public purpose"* (*Zorc v. City of Vero Beach*, 722 So. 2d 891, 893, Fla. 4th DCA 1998), citing *Doran*, 224 So. 2d 693, Fla. 1969). It's therefore not a rogue/fringe legal theory to thus extend §119.07(1)(c) "good faith", to admitting document non-existence via "zeros" on a tally sheet as a good-faith duty. (*Krause v. Reno*, 366 So. 2d 1244, 1252, Fla. 3d DCA 1979: *"Statutes enacted for the public benefit should be interpreted most favorably to the public,"* quoting *Doran* at 699))."

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c. Federal FOIA precedent reinforces this duty:

- i. *Oglesby v. United States Dep't of the Army* (920 F.2d 57, D.C. Cir. 1990): "When an agency informs a requester that no records have been found, it must explicitly advise him that he may appeal the adequacy of the search conducted" (at 66).
- ii. *Ruotolo v. Department of Justice, Tax Division* (28 F.3d 6, 2d Cir. 1994): "The letter concludes by advising the Ruotolos that the information sought 'is not retrievable by means of the Tax Division's indices'" (at 6), a quasi-"no record" response lacking appeal notice.
- iii. These norms confirm clarity on document non-existence is standard, not fringe or rogue, thus aligning with my request for such admissions on record. The City's silence therefore should be construed as violation of § 119.07(1)(c)'s good-faith standard, thus expanding the jurisprudence beyond only agency response time delays.

3. COMMON LAW'S ENDURING ROLE TO FILL IN THE GAPS OF STATUTORY SILENCE:

- a. Fla. Stat. § 2.01 incorporates *qui tacet consentire videtur*. *State v. Ashley* (701 So. 2d 338, Fla. 1997) confirms common law persists unless abrogated; Chapter 119 poses no barrier.
- b. *Vacation Ventures v. Holiday Promotions* (687 So. 2d 286, Fla. 5th DCA 1997) shifts the burden via silence, applicable here.
- c. Statutory silence preserves common law (*Thornber v. City of Fort Walton Beach*, 568 So. 2d 914, Fla. 1990; *Irven v. Dep't of Health & Rehab. Servs.*, 790 So. 2d 403, Fla. 2001)).

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d. Administrative Default via Tacit Acquiescence

- i. ***FAC R. 28-106.111(4)***: Non-response waives objections, paralleling ADACL.
- ii. ***FAC R. 12-6.003(3)***: Tax defaults finalize matters for non-response.
- iii. ***Dep’t of Revenue v. Vanjaria Enters., Inc. (675 So. 2d 252, Fla. 5th DCA 1996)***
and ***Florida Dep’t of Revenue v. New Sea Escape Cruises, Ltd. (894 So. 2d 954, Fla. 2005)*** uphold defaults in administrative non-judicial cases.

e. Adverse Inferences as Common Law Muscle: In *Public Health Trust of Dade County v. Valcin*, 507 So. 2d 596, 599 (Fla. 1987), the Florida Supreme Court greenlit adverse inferences when a party withholds evidence in its control, calling it “common-sense” that silence implies unfavorable facts. Caputo’s case fits: the city controls knowledge of Ordinance 2025-05’s documentation (or lack thereof) and stonewalls after 41 days. Valcin backs drawing an inference—either bad faith or a baseless ordinance—supporting ADACL’s *qui tacet consentire videtur* approach.

4. ADACL: BRIDGING THE GAP WITH PRECISION

a. Tally Sheet As Procedural Innovation : ADACL’s tally sheet—requiring “zeros” for non-existent records—plugs Chapter 119’s hole. Caputo’s PRR2025-22 demanded this clarity; the city’s blank response proves the gap. By formalizing non-existence, ADACL turns ambiguity into evidence, ripe for Valcin’s inference.

b. Three-Stage Process Backbone Restated: Initial Request, Notice of Fault, Default—offers the city three chances to comply, building a record of willful silence. This satisfies due process while arming a requestor with proof of default, aligning with *Nard, Inc. v. DeVito Contracting & Supply, Inc.*, 769 So. 2d 1138 (Fla. 2d DCA 2000), where unrebutted affidavits established facts. It’s a lifeline mandamus can’t match.

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X. CONCLUSION: ADACL'S LAWFUL NECESSITY

ADACL fills the chasm for “no adequate or speedy remedy at law” , arming a requestor with a record to challenge government actions— With no speedy or adequate remedy at law, ADACL stands as a legitimate common law bulwark, justifying a writ of prohibition and order to show cause.

ST. PETE BEACH, FL

RECORDS REQUESTS

Request #PRR2025- 22

[Click here](#) to scroll down and download your records.

Please see the attached public record request regarding the noise Ordinance.

Details

Submitted

Mon, Feb 03, 2025

Status

Completed

Name of Requestor

Geoffrey Caputo

Email

floridarepublic@gmail.com

Description of Request (Be as specific as possible, including name, dates, case numbers, etc, if known.)



Description of Request (Be as specific as possible, including name, dates, case numbers, etc, if known.)

Please see the attached public record request regarding the noise Ordinance.



I request (*select one*):

NoCopies

Requested Documents

File 	Size 
Noise Science Health Effects Bibliography.docx	21.24 KB
EPA Noise Control.pdf	3.19 MB
Noise Ord 2025-05- with Ex A Markup for first reading.pdf	221.61 KB
DR2 - 01 Kenneth Hysell RWB PP City Commission Meeting 09112023.pdf	2.27 MB
DR5 - 2007 PAG Way - Noise Surveys Through 07012023.pdf	110.91 KB

Requested Documents

File 	Size 
<u>DR1 - Case No. 23034 - Staff Presentation.pdf</u>	2.44 MB
<u>Opinion - Proposed new Noise Ordinance REV.pdf</u>	186.61 KB
<u>Dooley-pat-paper.pdf</u>	49.24 KB
<u>Ord 2025-05 BIS.pdf</u>	424.79 KB
<u>Noise Ord. Presentation Attorney B. Vose.pdf</u>	1.8 MB

Requested Documents

File 	Size 
<u>DR2 - Case No 23034 - Submitted Correspondence.pdf</u>	4.72 MB
<u>Agenda Report Noise Ordinance.pdf</u>	56.69 KB
<u>DR2 - Case No 23034 - Letters of Support Opposition.pdf</u>	27.09 MB
<u>DR2 - 02 Bob Micklitsch RWB City Commission 09112023.pptx</u>	583.57 KB
<u>DR1 - Case No. 23034 Staff Report - See Page 6.pdf</u>	1.77 MB

Requested Documents

File 


Size 

[EPA 1974 study_2000L3LN.pdf](#)

7.5 MB

5 

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CITY OF ST. PETE BEACH

City Commission Meeting

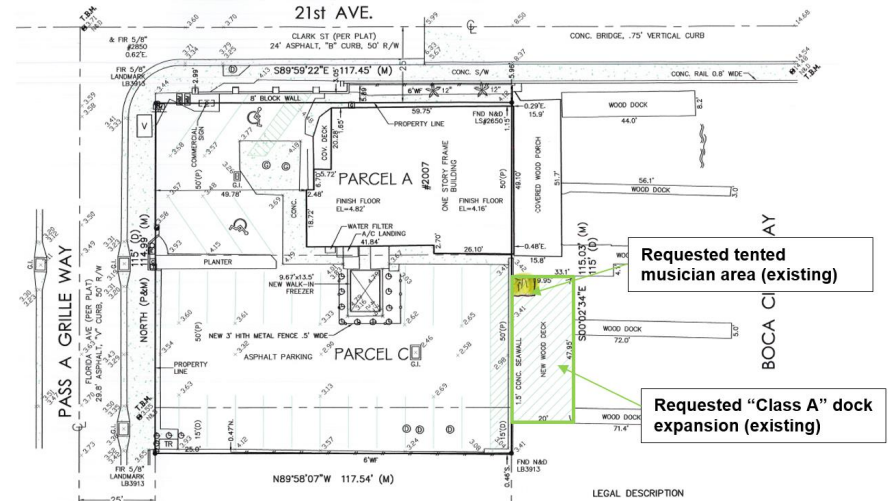
**September 11, 2023
6:00 p.m.**

CUP No. 23034/Res. 2023-08

RED, WHITE & BOOZE “CLASS A” DOCK EXPANSION AND OUTDOOR LIVE MUSIC 2007 Pass-a-Grille Way

OWNER: Collom Properties LLC

AGENT/APPLICANT: Tim Weber & Kyle Bass



This is a two-part request as amended:

- (1) Request to allow the continued use of an approximately 20x48' (960 SF) “Class A” dock addition used for dining and drinking that was erroneously approved without a Conditional Use Permit (LDC Sec. 15.4.(m));
- (2) Request to establish an area to play live music on the outdoor dining and drinking deck (LDC Sec. 15.4.(n)).

Application Timeline

May 5, 2023	Application submittal – Outdoor music
May 17, 2023	Technical Review Committee review (first)
June 29, 2023	Applicant amends application to request additional outdoor music permissions
July 6, 2023	City rescinds Class A dock permit (#2201094)
July 24, 2023	Applicant amends application to request approval for erroneously-permitted “Class A” dock permit.
August 9, 2023	Technical Review Committee review (second)
August 25, 2023	Mailing sent to 89 properties within 500 feet
August 30, 2023	Legal ad posting
September 1, 2023	Sign posting at site

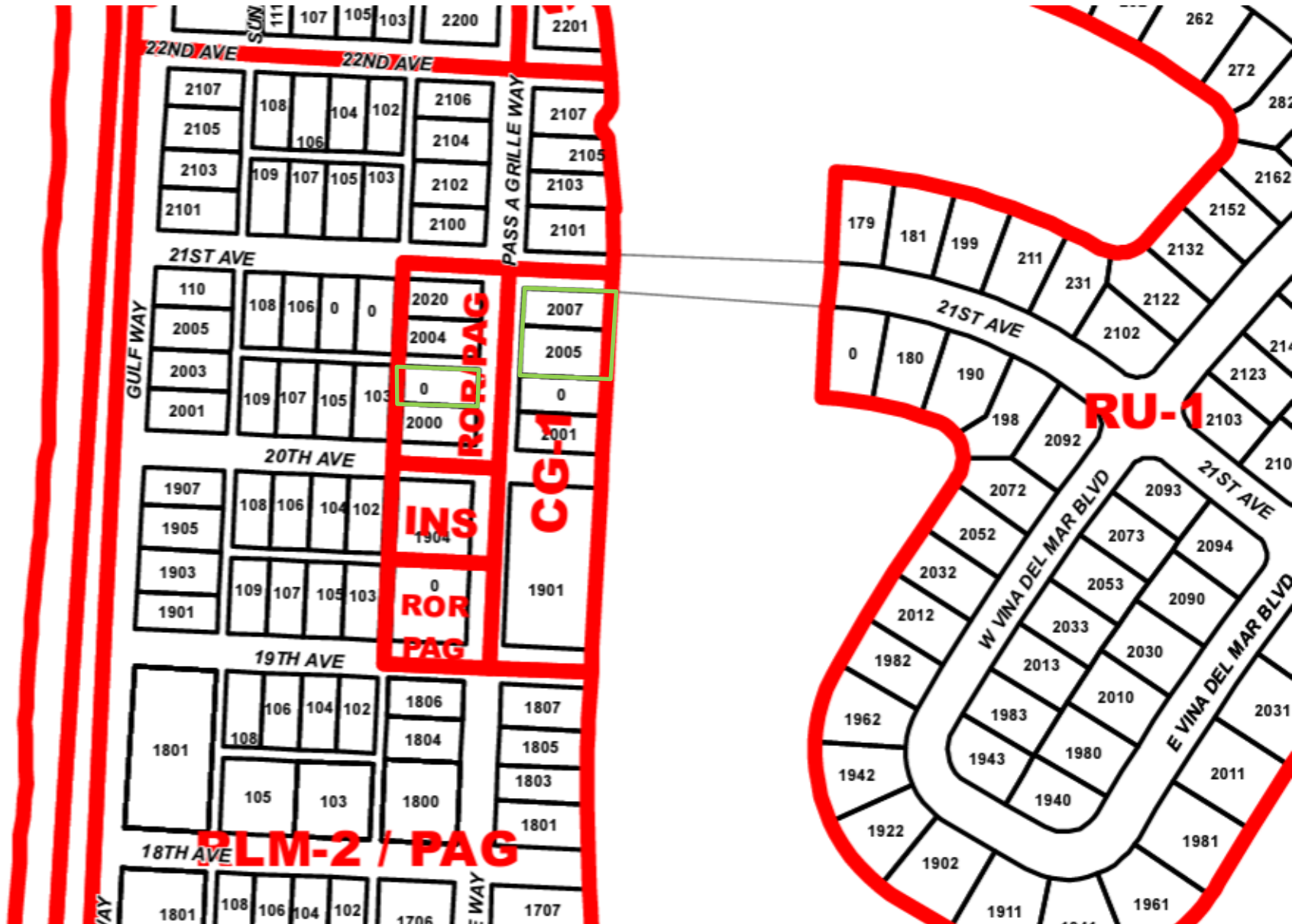
LISTING OF EXHIBITS

- A. Aerial Map**
- B. Zoning Map**
- C. Current Survey**
- D. Site Plan**
- E. Request #1 – Basis and Explanation**
- F. Request #2 – Basis and Explanation**
- G. Code of Ordinances Noise Requirements**
- H. Noise Complaint Data – 2007 Pass-a-Grille Way**
- I. Staff Considerations**
- J. Photos of the Site**
- K. Staff Findings**
- L. Staff Recommendation**
- M. Requested Motion**
- N. *Staff Report and Analysis**
- O. *Comprehensive Plan**
- P. *Land Development Code**

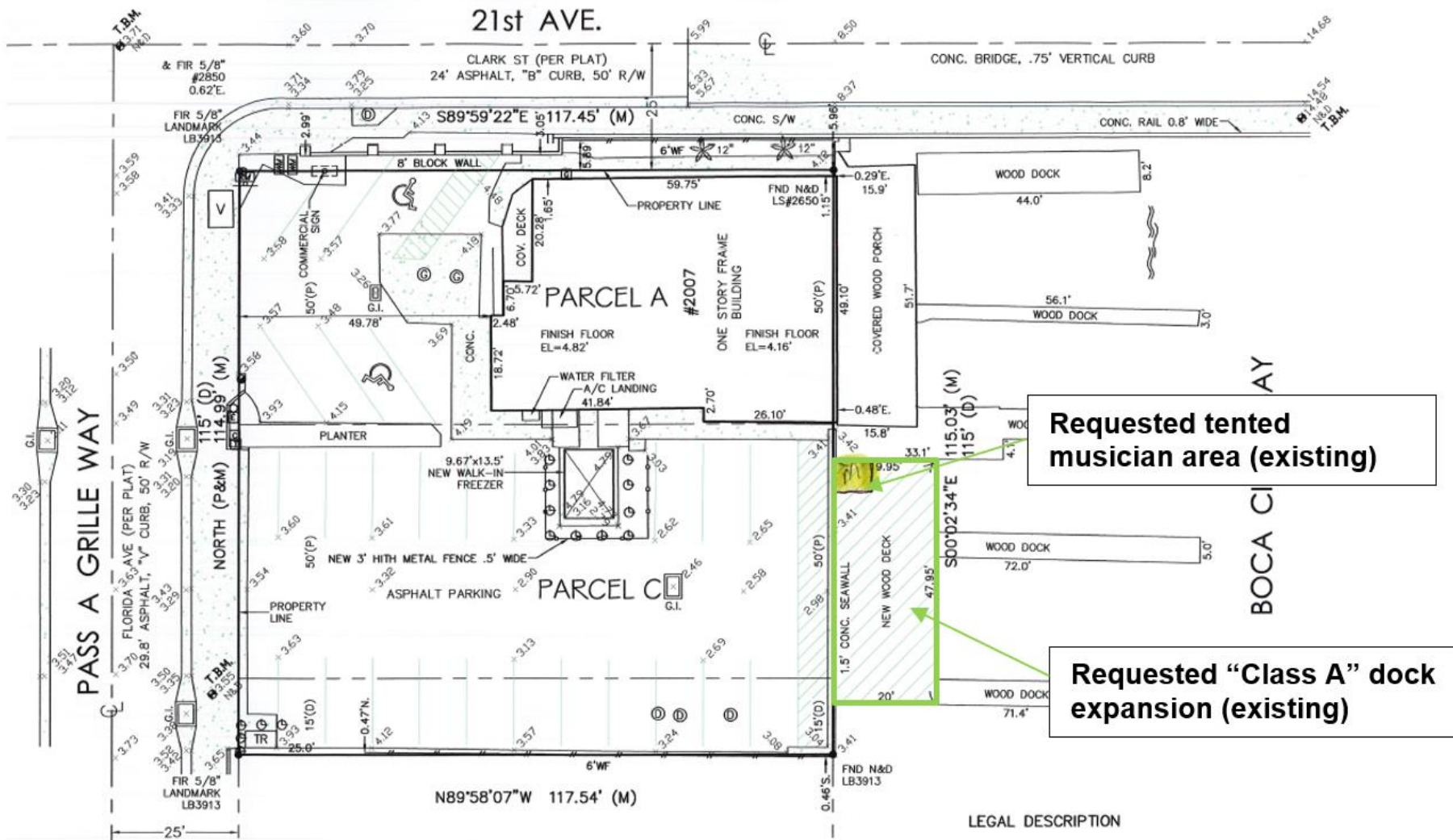
Aerial Map



Zoning Map



Site Plan



CG-1 Commercial District – Request #1

Sec. 15.4. Allowable conditional uses.

Subject to the provisions or restrictions contained in this section and elsewhere in this Code, allowable conditional uses in the CG-1 Commercial District are as follows:

[...]

(m) Docks, commercial—Classes A, B, C, and D.

[...]

Sec. 2.1. Words, terms and phrases defined.

[...]

Dock means any structure, including a pier, wharf, loading platform, tie poles, dolphins, accessory structures, or a boat lift which is constructed on piles, over open water, or which is supported by flotation on the waters of the county. Docks are further classified as follows:

[...]

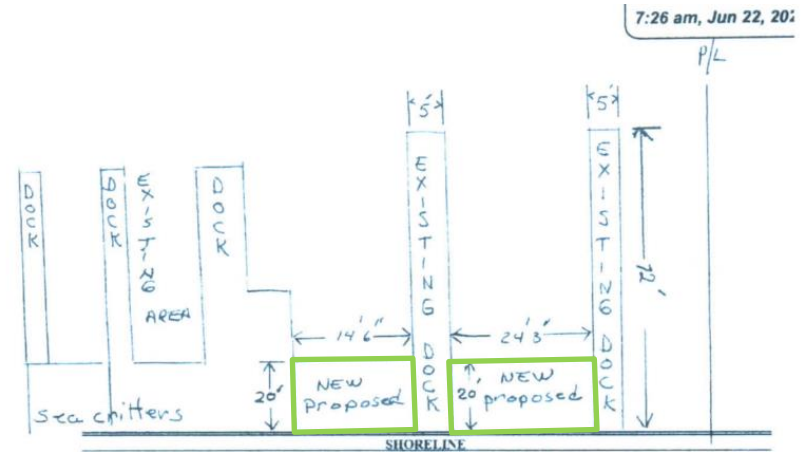
(2) **Commercial dock** means a structure on piles over water or a structure that is defined as a commercial dock by the county environmental resources management division and which is designed or used to provide a berth for and access to one or more private, charter, commercial or party boats further classified and defined, as follows:

a. **Class A** means any dock used in connection with a hotel, motel, restaurant and where the slips are not rented, leased or sold, but utilized as an enhancement to the principal function of the basic facility.

[...]

Request #1 - Explanation

- All expansions of Commercial “Class A” docks require a CUP;
- A permit to expand the dock with new decking was erroneously approved without a CUP in May 2022 (revoked July 2023);
- The permit description did not allude to the new decking being used for seating.
- Outdoor seating without music is permitted; the dock itself requires the CUP.



PERMIT # 2201094

DATE: 6/17/22

SITE ADDRESS: 2007 Pass-A-Grille Way

PROJECT INFORMATION:

Build two deck areas to existing docks.
Increasing size from 16' to 20' wide

CG-1 Commercial District – Request #2

Sec. 15.4. Allowable conditional uses.

Subject to the provisions or restrictions contained in this section and elsewhere in this Code, allowable conditional uses in the CG-1 Commercial District are as follows:

[...]

- (n) Eating and drinking establishment—Fast food restaurant, nightclub, outdoor dining and/or drinking areas that provide for outdoor music, or roof dining and/or drinking areas, subject to section 6.24 of this Code as may be applicable.

[...]

Sec. 2.1. Words, terms and phrases defined.

[...]

Eating and drinking establishment means a business primarily engaged in serving prepared food and/or beverages for consumption on or off the premises. Such uses are regulated by type as follows:

[...]

Outdoor dining means a delineated area, including patios and similar areas, affiliated with a restaurant unenclosed by walls where tables, seating and other furnishings are provided for patrons of the restaurant for eating and drinking. An outdoor dining area located above the first habitable floor of the structure to which it is accessory shall be classified as a roof dining area. These areas shall be further classified within the district divisions of this Code by whether they contain equipment, permanent or temporary, that is dedicated to the playing of amplified music and/or are permitted to host the playing of musical instruments.

Outdoor drinking means a delineated area, including patios and similar areas, affiliated with a bar/lounge unenclosed by walls where tables, seating and other furnishings may be provided for patrons of the bar/lounge for consuming beverages. For temporary lodging uses, the outdoor drinking area may occupy a portion of a private sand beach affiliated with an accessory hotel or motel bar reserved for the exclusive use of overnight guests. An outdoor drinking area located above the first habitable floor of the structure to which it is accessory shall be classified as a roof drinking area. These areas shall be further classified within the district divisions of this Code by whether they contain equipment, permanent or temporary, that is dedicated to the playing of amplified music and/or are permitted to host the playing of musical instruments.

[...]

[...]

Request #2 – Requested Parameters

The applicant is requesting the following parameters for approval of outdoor music:

- **Instrument options:**
 - Percussion
 - Keyboard
 - Guitar
 - String instruments
 - Electric
- **Hours:**
 - 11a to 10p each day (11 hours/day or 77 hours/week);
 - Special events: Extension to 11p
- **Solo and band performances**
- **Amplification equipment brought by visiting musicians**

Code of Ordinances Ch. 46 Art. IV - NOISE

There are two major sound level considerations in the city's ordinances for the subject request:

- 1) Maximum decibel level (dBA) limitations;
- 2) "Loud and raucous" prohibitions.

Sec. 46-132. - Sound level limitations.

- Normal maximum receiving sound level city-wide is 65 dBA.
 - About the sound of normal conversation
 - A bit quieter than a washing machine
 - A bit louder than a normal office
 - Does not apply to construction, special events, etc.
- Between 10 PM and 7 AM in residential zones and public space, the maximum receiving sound level is 55 dBA.
 - About the sound of normal rainfall
 - A bit quieter than a dishwasher
 - A bit louder than a refrigerator hum

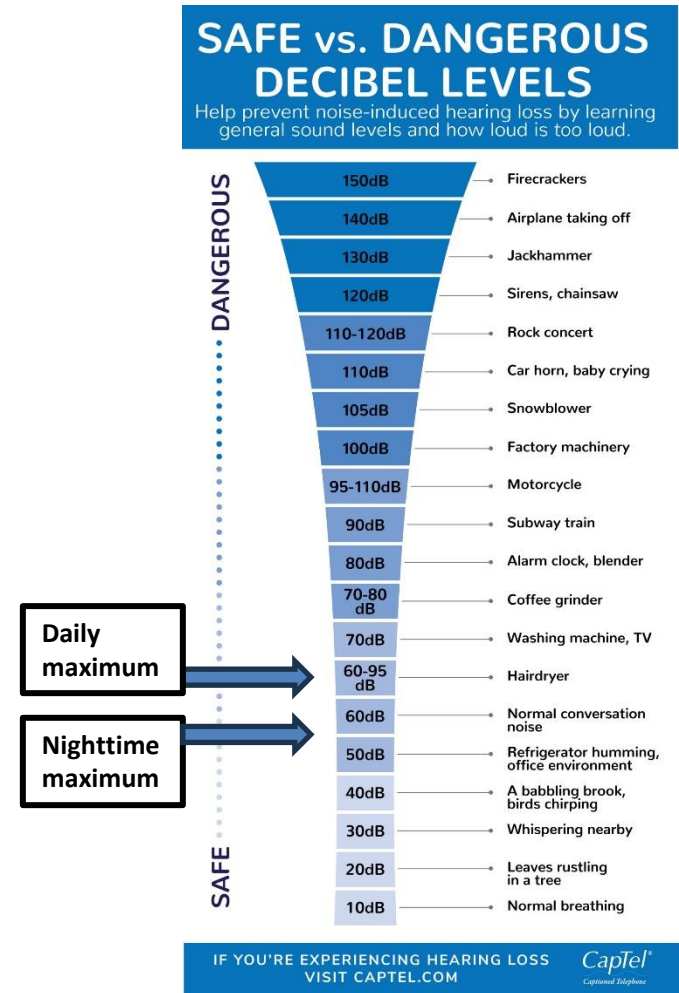


Chart source: Captel

Noise complaint data (2023)

Between May 10 and July 24, the Sheriff's Office received 18 complaint calls about noise at the property.

- In two instances, the owner chose to turn down the music.
- None of the complaints resulted in the issuance of a citation.

Code Enforcement and the Sheriff's Office completed six sound readings for the property between May 27 and July 1.

- Reading of 81.2 dBA around 6 PM on May 27 from bridge.
 - Owner chose to turn down music. New reading: 65.2 dBA
- Three of six readings resulted in no violation of decibel limits.
- Reading of 66 dBA around 8 PM on July 1.

Sec. 46-133. - Loud and raucous/enumeration.

- In addition to decibel limitations, the city also prohibits “loud and raucous noise”.
- Definition:

Loud and raucous shall mean any sound that, because of its volume level, duration and character, annoys, disturbs, injures or endangers the comfort, health, peace or safety of reasonable persons of ordinary sensibilities.
- Pertinent prohibitions (Sec. 46-133):

(b)(4) Radios, amplifiers, phonographs. The using, operation or permitting to be placed, used or operated any radio, amplifier, musical instrument, phonograph or other device for the producing or reproducing of sound in such manner as to cause loud and raucous noise;

(b)(11) Noise from electric bass or drums either produced by a live band or through a sound system that is loud and raucous.

Sec. 46-133. - Loud and raucous/enumeration.

- Some noises are obvious enough to be enumerated as loud and raucous.

Examples:

- Continuous sounding of vehicle horns other than in emergency contexts
 - Driving piles outside of permitted construction hours
 - Cars backfiring or overloaded to cause grating, rattling, etc.
 - Late night throwing of bottles into dumpsters
 - Continuous screaming other than in emergency contexts
- In less obvious contexts, such as the subject request, the city employs a “reasonable person” standard.

Staff considerations

- There are situations where, due to sustained amplified noise of a certain character, a use could be considered raucous without persistently violating the decibel limitations.
 - Is there potential for sharp, impulsive, bass-driven, or other sounds that may be irritating to a reasonable person?
- There must be a balancing between the maintenance and improvement of commercial areas, and minimizing the threat to welfare posed by nuisances and incompatible land uses.
 - At what decibel level does background noise become irritating?
 - What are reasonable hours/dates/time ranges for music?
 - Would certain types of music have less of a direct impact on residential character?

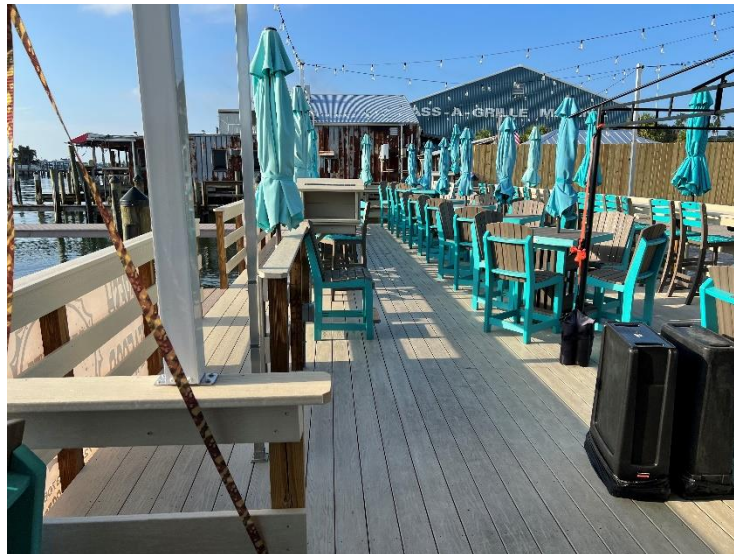
Photos of the Site – Sign Posting



Photos of the Site – Front Parking Area



Photos of the Site – New Deck



Photos of the Site – Deck:Dock Size



Sec. 4.4. Standards for review.

- (a) *Standards applicable to all conditional uses.* When considering an application for approval of a conditional use, the city commission review shall consider the following standards:
- (1) Whether the conditional use is consistent with the goals, objectives, and policies of the Comprehensive Plan, any adopted special area plan and these regulations;
 - (2) Whether the proposed use will be compatible with the character of the existing area, including existing structures and structures under construction, existing public facilities and public facilities under construction, and residential, commercial and/or service facilities available within the existing area.
More specifically:
 - a. Whether the overall appearance and function of the area will be significantly affected
consideration shall be given to the existence of other uses in the area, based on the number, size, and location of the uses and the intensity and scale of the proposed and existing uses in the area;
 - b. Whether the application will preserve any city, state or federally designated historic, scenic, archaeological, or cultural resources;
 - c. Whether the application will be compatible with adjacent development, if any, based on characteristics such as size, building style and scale; or whether such incompatibilities are mitigated through such means as screening, landscaping, setbacks, and other design features; and
 - d. Whether the application will have significant adverse impacts on the livability and usability of nearby land due to noise, dust, fumes, smoke, glare from lights, late-night operations, odors, vehicular traffic, truck and other delivery trips, the amount, location, and nature of any outside activities, potential for increased litter, or privacy and safety issues.
 - (3) Whether the transportation system is capable of adequately supporting the proposed use in addition to the existing uses in the area. Evaluation factors include street capacity and level of service, access to arterials, transit availability, on-street parking impacts, if any, site access requirements, neighborhood impacts, and pedestrian safety;
 - (4) Whether the minimum off-street parking area required and the amount of space needed for the loading and unloading of trucks, if applicable, will be provided and will function properly and safely;
 - (5) Whether generally, the public health, safety and welfare will be preserved, and any reasonable conditions necessary for such preservation have been made;
 - (6) Whether the applicant has demonstrated the financial and technical capacity to complete any improvements and mitigation necessitated by the development as proposed and has made adequate legal provision to guarantee the provision such improvements and mitigation; and
 - (7) Whether the proposed use complies with all additional standards imposed on it by the particular provision of these regulations authorizing such use and by all other applicable requirements of the regulations of the City of St. Pete Beach.

Sec. 6.24. Outdoor dining and outdoor drinking areas.

[...]

- (6) For eating and drinking establishments providing for outdoor music, the following shall be provided:
 - a. The product specifications of any permanent speakers, amplifiers and other support equipment to be installed outdoors.
 - b. An explanation of the hours of operation of the outdoor dining and/or drinking area, including any special provisions or intentions for live music.
 - c. A description of how music will be regulated in accordance with the City's noise ordinance as found in Chapter 46, Article IV of the Code of Ordinances.

[...]

Staff Findings

Request #1: Staff finds the applicant has met the burden of approval for the Class A dock deck expansion, that it would not adversely affect the public interest, and would be generally compatible with adjacent properties and other properties in the district.

Request #2: Staff finds that granting the outdoor music request as initially proposed would adversely affect the public interest, and would not be compatible with adjacent properties and other properties in the vicinity, due to the potential for prolonged raucous noise resulting in nuisances and incompatibilities with surrounding land uses. Staff recommends modification to the original request.

Staff Recommendation

Staff recommends **approval** of Resolution 2023-08 with the following twelve (12) conditions:

Request #1- Dining Deck

- 1) Tableware, to include plates, cups, utensils, napkins and tablecloths that are served or made available in the dining deck area, shall be reusable.
- 2) Within two months of the issuance of the development order for this request, the applicant shall modify the parking area to create two accessible parking spaces that meet state requirements for a business offering 26-50 parking spaces. They shall also modify the two parking spaces shortened by recent pole sign renovations to be made available for golf carts, motorcycles, or other appropriately-sized vehicles only, and signage shall be installed or stamped on the asphalt to that effect.

Staff Recommendation

Request #2 - Outdoor Music

- 3) Except as provided in condition #8, only acoustic string instruments shall be permitted to be played in the outdoor areas of this property. “Outdoor areas” for the purpose of these conditions shall be defined as any area within the property boundary or adjoining submerged land outside of the approximately 60x49’ walled restaurant, specifically including any open porch areas, but excluding any future additions that are roofed and enclosed along all sides by a solid wall and windows from floor to ceiling.
- 4) Except as provided in condition #8, any acoustic string instrument played in any outdoor area shall be unamplified. “Unamplified” for the purpose of these conditions shall be defined as lacking any kind of separate equipment, including but not limited to speakers, amplifiers, or any kind of permanent or handheld device, used to increase the decibel level of an instrument above that created by in-body vibration due to strumming, bowing or plucking of the instrument.
- 5) Except as provided in condition #8, no external amplification equipment may be installed or operated to pipe music from the indoor area into the outdoor areas of this property, or to amplify any outdoor music, including voice or instruments. Any amplification equipment installed indoors to support amplified indoor music shall be oriented toward the interior and not be located outdoors or be oriented to pipe amplified music outdoors.
- 6) Permitted hours for the playing of acoustic outdoor music are as follows: Wednesday – Friday: 5–10 PM Saturday: 12–4 PM & 5–10 PM Sunday: 11 AM–3 PM & 4–10 PM

Staff Recommendation

Request #2 - Outdoor Music (Continued)

- 7) Outdoor music shall not exceed the following decibels at any hour in which music is permitted:
Ten feet from any outdoor speaker installed on the property: 70 dBA
The property line of any receiving residential property: 55 dBA
The standards above are in addition to those specified in the Code of Ordinances.
- 8) Between the hours of 12 PM and 3 PM each Saturday and Sunday, the applicant shall be permitted to play amplified outdoor music. All amplified music shall come from permanent speakers installed on the property that are oriented toward the property and away from nearby residences to the north and east, and equipped with sound limiting equipment to ensure that decibel standards listed in condition #7 can be adhered with. Equipment product specifications and a layout plan must be provided to staff prior to installation. Equipment shall produce no bass. Instruments shall be limited to string instruments unless otherwise approved by the city manager. Under no circumstances shall the playing of acoustic drum sets or percussive instruments that repetitively produce similar impulsive sounds be permitted without amendment of this conditional use permit by the City Commission.
- 9) All outdoor musical artists and bands shall be limited to the tented area as shown on the site plan.
- 10) The tent placed over the outdoor music area shall be no larger than 10 x 10 feet in size. Upon issuance of a tropical storm or hurricane warning, the tent covering the musician area shall be removed and safely stored indoors. The tent shall be inspected by the building and fire officials, if necessary, to determine compliance with the building and fire codes.

Staff Recommendation

General Conditions

- 11) Any violation of the above-stated conditions will allow the City Commission to rescind or modify the Conditional Use Permit.
- 12) The City Commission may review the Conditional Use Permit periodically to determine whether the order is in compliance with the terms and conditions herein.

Requested Motion

Motion to Approve Resolution 2023-08



**PLANNING DIVISION
CONDITIONAL USE APPLICATION
STAFF REPORT TO THE
CITY OF ST. PETE BEACH CITY COMMISSION**

CASE NO.: 23034

HEARING DATE: September 11, 2023

OWNER/APPLICANTS: Tim Weber & Kyle Bass (Agents) for Charles & Helen Collom (Owners)

PREPARED BY: Brandon Berry, Planner

This application is a request for a Conditional Use Permit:

REQUEST:	<p>This is a two-part request as amended:</p> <ul style="list-style-type: none"> (1) Request to allow the continued use of an approximately 20x48' (960 SF) "Class A" dock addition used for dining and drinking that was erroneously approved without a Conditional Use Permit (LDC Sec. 15.4.(m)); (2) Request to establish an area to play live music on the outdoor dining and drinking deck (LDC Sec. 15.4.(n)).
LOCATION:	2007 Pass-a-Grille Way; Parcel ID # 18-32-16-68634-000-0020.
ACREAGE:	Approximately 0.3 acres (13,300 sq. ft.)
EXISTING LAND USE	CG-1 Commercial District on the Zoning Map and CG Commercial General on the Future Land Use Map
SURROUNDING FUTURE LAND DESIGNATIONS:	<p>North – 21st Ave & RLM – Residential Low Medium</p> <p>South – CG Commercial General</p> <p>East – Water & RU Residential Urban</p> <p>West – Pass-a-Grille Way & ROR Residential/Office/Retail</p>
SURROUNDING ZONING MAP DESIGNATIONS:	<p>North – 21st Ave & RLM-2/PAG – Residential District in the Pass-a-Grille Overlay District</p> <p>South – CG-1 Commercial District</p> <p>East – Water & RU-1 Residential District</p> <p>West – Pass-a-Grille Way & ROR/PAG – Residential/Office/Retail in the Pass-a-Grille Overlay District</p>
SURROUNDING EXISTING USES:	<p>North – Single-family residence</p> <p>South – Restaurant</p> <p>East – Single-family residential</p> <p>West – Convenience store & strip center (coffee shop & former restaurant)</p>

BACKGROUND

The owner initially submitted the subject request on May 5, 2023 to allow live music on an existing outdoor seating deck, located at the seawall at the southern end of the property's dock area. The construction of the deck was erroneously permitted without a conditional use permit in May 2022, following the property owner's purchase of the property and existing restaurant building in April 2022, which is sought to be rectified through this case.

The owner has applied and been approved to make other improvements to the property since purchase, including new signage, installation of a new walk-in cooler and generator in the parking

area south of the restaurant, and installation of roof condenser units. The owner also received a variance (#23018) to install an eight-foot fence in the waterfront yard in June 2023, and has a pending application for a secondary front yard encroachment of a roofed patio addition to the western front of the restaurant.

CODE ENFORCEMENT DATA

As of August 16, 2023 this property has been the subject of three documented local code enforcement complaints related to noise and music since the current owner's purchase, filed in November 2022, April 2023, and July 2023. The initial two complaints are closed and the third relates to the playing of music in an outdoor restaurant seating area, which approval of this permit would resolve. The property has also been the recipient of eighteen complaints to the Pinellas County Sheriff's Office as of August 16th for noise, as follows:

May 10th: One call (8:54 PM)
May 19th: Five calls from two numbers (7:24, 7:31, 7:55, 8:13, 9:36 PM)
May 20th: One call (7:31 PM)
May 25th: One call (9:18 PM)
May 27th: Two calls (7:38, 8:57 PM)
June 2nd: One call (8:13 PM)
June 4th: Two calls (2:11, 2:40 PM)
June 10th: One call (6:43 PM)
June 18th: One call (11:23 AM)
June 22nd: One call (9:29 PM)
July 15th: One call (6:43 PM)
July 24th: One call (4:08 PM)

It should be noted that complaints made prior to June 10th were received during dates the owner's restaurant advertised live music at the property through social media. However, the final complaint received on May 19th, and the complaint received on May 25th, were outside of the hours the restaurant advertised for live music. None of the dates resulted in the issuance of a citation, but sheriffs' reports were filed on May 19th (SO23-160945) and June 10th (SO23-187710). In the former instance, the owner chose to turn down the music.

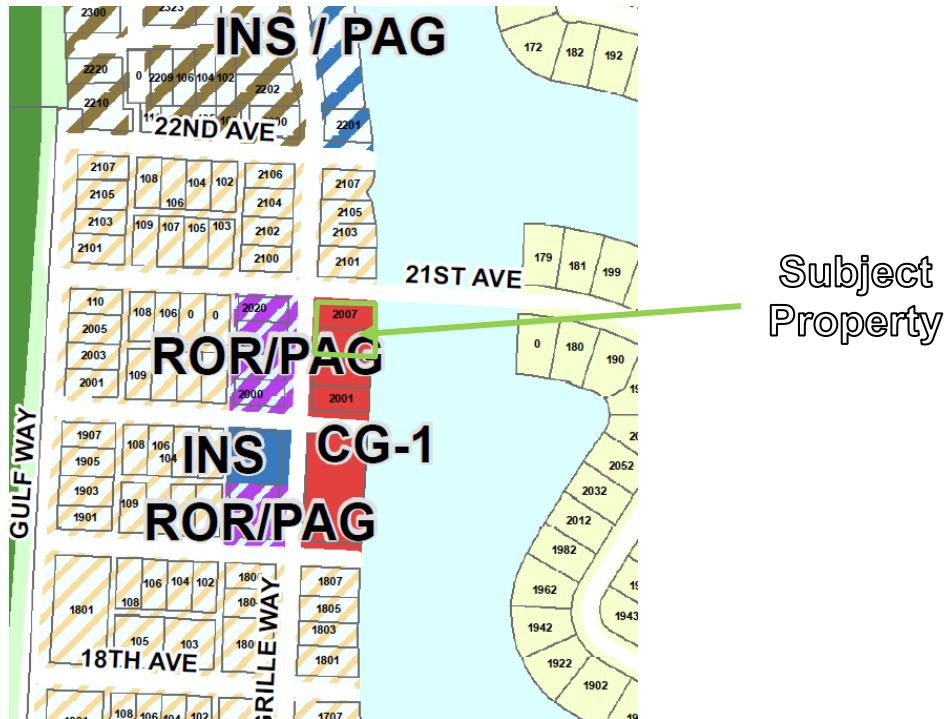
Sound level readings are taken from calibrated equipment that provides an average reading over a selected time period. Readings are taken with a sound source present, and then with the sound source removed, herein called an ambient reading. As decibels are logarithmic units, the addition of two sources producing equal decibels will result in a sound level three decibels higher than either source individually. For instance, adding together two 55 dBA sources will produce a sound level of 58 dBA, and adding together two 70 dBA sources will produce a sound level of 73 dBA. Accordingly, the noise from a source reading must be more than three decibels higher than the ambient reading in order for the test to be considered a valid difference under the parameters set for the equipment.

Readings were taken at the dates and locations shown in the table below.

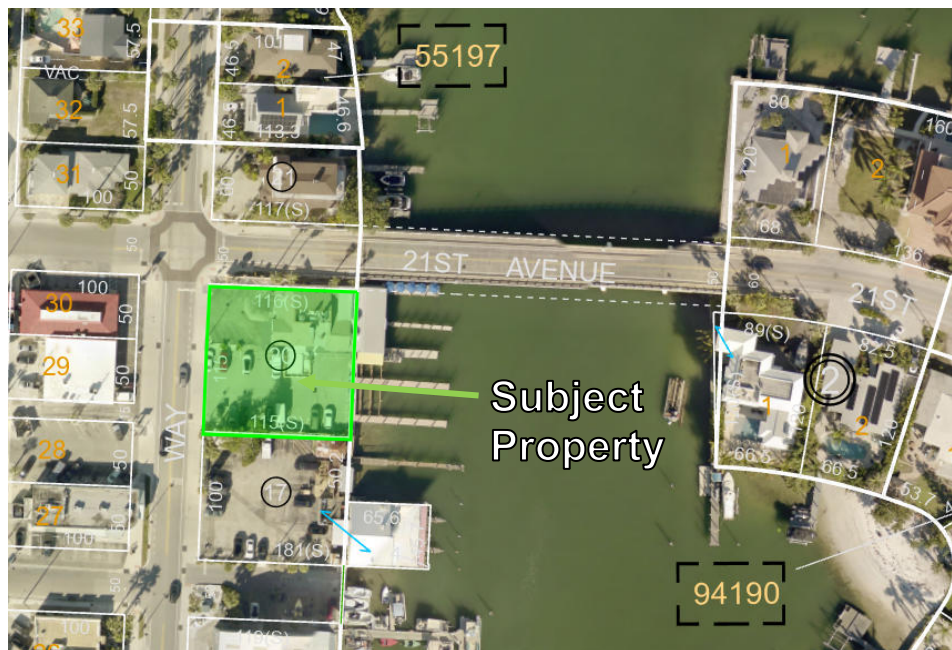
Date	Time	Location	Source	Ambient Reading (dBA)	Noise Source Reading (dBA)	Adjusted Source Level (dBA)
May 27	6:00 PM	Vina Del Mar Bridge	SPB Code Enforcement	66.0	81.2	81.2
	6:30 PM	Vina Del Mar Bridge	SPB Code Enforcement	62.6	67.2	65.2
	8:00 PM	Vina Del Mar Bridge	Pinellas Sherriiff	N/A	58.9	N/A
June 4	3:30 PM	2032 W Vina Del Mar Blvd	SPB Code Enforcement	55.5	60.5	58.5
July 1	7:30 PM	2032 W Vina Del Mar Blvd	SPB Code Enforcement	59.8	61.5	Invalid (<3 dBA diff)
	8:00 PM	Vina Del Mar Bridge	SPB Code Enforcement	64.4	68.0	66.0

Regarding additional code enforcement citations, the property was the recipient of a complaint related to unpermitted signage in April 2023, which has been resolved through the removal of the signage, and the installation of outdoor lights also in April 2023, which has been resolved by a determination that the lights comply with local code requirements. The property also had cases opened related to roof work without a permit and a cooking oil spill in June and July 2023 respectively, which have both been resolved.

ZONING MAP



AERIAL MAP





While both subject requests require City Commission approval, the area is already established and contains a temporary tent of approximately 9x9 feet over the northwestern area of the seating deck. The owner has routinely hosted musicians at the property over the past months. There have been other occasions in which music was played for the purpose of conducting sound readings.

Wednesday – Friday: 5–10 PM
Saturday: 12–4 PM & 5–10 PM
Sunday: 11 AM–3 PM & 4–10 PM

The owner has since amended the application via their agent to request the following:

All days: 11 AM-10 PM
Special Events: 11 AM-11 PM

From aerial measurements, the musician area is proposed to be approximately 125 feet from the northern residential property at 2101 Pass-a-Grille Way, and 275 feet from the closest Vina-Del Mar residential property at 170 21st Ave.

The city establishes a 65 decibel (dBA) limitation for residential single-family receiving properties and public space between 7 AM and 10 PM, and 55 dBA outside those hours. Commercial receiving properties have a 65 dBA maximum receiving limit at all hours of the day. For reference, according to Yale Environmental Health and Safety, a household refrigerator hum is approximately 55 dBA, while a normal conversation at standard distance is approximately 65 dBA¹.

According to the Centers for Disease Control and Prevention, sustained noise at 80 decibels can potentially cause damage to hearing if experienced for two hours or more². While this parameter is substantially higher than permitted to be sustained anywhere in the city, the Environmental Protection Agency indicated in the 1970s that sustained dBA over 55 decibels (adjusted) is a basis for outdoor annoyance in residential areas³, while a range of 53-62 dBA is referenced as being potentially perceived as annoying in a newer source⁴. Sources indicate that the typical walls of a residential building provide between 20 and 28 decibels of attenuation compared with an outdoor noise reading, which would limit a daytime receiving dBA inside a typical residential home experiencing its maximum outdoor decibel level of 65 dBA to 40-45 dBA, or approximately the sound of light rain⁵.

According to the inverse square law, provided no other intervening amplification or attenuation, the intensity of sound dissipates by 6 decibels for each doubling of distance from the sound source. For instance, if a sound is measured at 65 decibels at 50 feet from a source, it will measure 59 decibels at 100 feet, 53 decibels at 200 feet, and 47 decibels at 400 feet.

Pursuant to Land Development Code Division 29, this site does not directly increase intensity as defined as an increase in floor area, but may have increased trip generation as a byproduct of the seating area increase. The applicant has not applied to increase potable water supply to the site, increase solid waste areas, or complete any work that triggers stormwater or sewer capacity increases. However, the applicant will need to confer with the city's transportation department to determine if transportation concurrency will need to be demonstrated for this request.

¹ Yale Environmental Health & Safety. *Noise and hearing conservation*. Yale University. <https://ehs.yale.edu/noise-hearing-conservation>.

² Centers for Disease Control and Prevention. (2022, November 8). *What noises cause hearing loss?*. Environmental Health. https://www.cdc.gov/nceh/hearing_loss/what_noises_cause_hearing_loss.html.

³ Environmental Protection Agency. (1974, March). *Information on levels of environmental noise requisite to protect public health and welfare with an adequate margin of safety*. <https://nepis.epa.gov/Exe/ZyPDF.cgi/2000L3LN.PDF?Dockkey=2000L3LN.PDF>.

⁴ Skagerstrand, Å., Köbler, S., & Stenfelt, S. (2017) Loudness and annoyance of disturbing sounds – perception by normal hearing subjects. *International Journal of Audiology*, 56(10), 775-783. DOI: 10.1080/14992027.2017.1321790

⁵ Locher, B., Piquerez A., Habermacher, M., Ragettli, M., Rössli, M., Brink, M., Cajochen, C., Vienneau, D., Foraster, M., Müller, U., & Wunderli, J.M.. (2018). Differences between outdoor and indoor sound levels for open, tilted, and closed windows. *Int J Environ Res Public Health*, 15(1), 149. DOI: 10.3390/ijerph15010149.

⁶ American Planning Association. (2007). Noise and vibration. In F.R. Steiner & K. Butler (Eds.), *Planning and urban design standards student edition* (pp. 110-115). John Wiley & Sons, Inc.

Technical Review Committee

This case was initially reviewed at the May 17, 2023 Technical Review Committee meeting, when the request pertained solely to the outdoor music area. Comments from staff addressed occupational load calculations, fire equipment, application code requirements, music equipment specifications, and operational characteristics of the request.

The case was returned to Technical Review Committee on August 9, 2023 due to the applicant requesting amended operational characteristics for the outdoor music area as well as the addition of the “Class A” dock request. Comments pertained to occupancy loads, tableware, parking requirements and ideal layout of parking spaces, equipment placement, and clarification on special events. Additionally, the representative for Code Enforcement requested that any outdoor music approval be for acoustic music only.

Land Development Code Sec. 4.4 – Standards for review.

When considering an application for approval of a conditional use, the City Commission review shall consider the following standards:

- (1) Whether the conditional use is consistent with the goals, objectives, and policies of the Comprehensive Plan, any adopted special area plan and these regulations;**

The conditional use request is consistent with the Comprehensive Plan in the following ways:

FUTURE LAND USE ELEMENT:

Future Land Use Policies - Green Practices, Residential Character and Introduction to Land Use Categories

GOAL 2:

The City shall ensure that the residential character of the City of St. Pete Beach is maintained and protected while:

- Maximizing the potential for economic benefit resulting from the tourist trade and the enjoyment of natural and man-made resources by residents and visitors alike.
- Minimizing the threat to health, safety, and welfare posed by hazards, nuisances, incompatible land uses, and environmental degradation.
- Maintaining the community's recreation, open space and beaches.

Objective 2.4

Consistent with this comprehensive plan, as amended, the City of St. Pete Beach shall enhance and protect the City's character through the encouragement of redevelopment which ensures an orderly and aesthetic mixture of land uses.

Policy 2.4.1

The City shall, through administration of the LDC, encourage the redevelopment or rehabilitation of existing non-residential areas and uses.

Staff finds that conditions are required to ensure that the request is not contrary to the following objective and policy:

FUTURE LAND USE ELEMENT:

Future Land Use Policies - Green Practices, Residential Character and Introduction to Land Use Categories

GOAL 2

Objective 2.1

The integrity and quality of life throughout the City, including existing residential neighborhoods, as well as core commercial and resort areas, will be maintained through the enforcement of the land development regulations and shall be encouraged to be improved, and for those properties experiencing blighting conditions such as deterioration, degradation, and distress shall be encouraged to redevelop through the use of land development regulations and other incentives, in accordance with the Future Land Use Element.

Policy 2.1.5

Through the enforcement of the land development regulations, existing residential areas shall be protected from the encroachment of incompatible uses; likewise, other land use areas shall be protected from the encroachment of incompatible residential uses.

(2) Whether the proposed use will be compatible with the character of the existing area, including existing structures and structures under construction, existing public facilities and public facilities under construction, and residential, commercial and/or service facilities available within the existing area. More specifically:

- a. Whether the overall appearance and function of the area will be significantly affected. Consideration shall be given to the existence of other uses in the area, based on the number, size, and location of the uses and the intensity and scale of the proposed and existing uses in the area;** *Staff finds the overall appearance and function of the area will not be significantly affected by the dock component of this request. Regarding the outdoor seating deck request, the property has historically contained multiple docks for customer vessel mooring in its adjacent submerged land area, which also contains the restaurant's roofed patio on the northern side of the waterfront. The subject dining deck is unenclosed and extends less than half of the distance into the waterway when compared with the neighboring restaurant to the property's south.*

Regarding the request for outdoor music, the property under former ownership had hosted occasional musicians on its covered patio since at least late 2020.

This request is to establish the musician area on the new outdoor deck, which does not have a solid roof or other barriers to attenuate sound as are in place under the covered patio. While outdoor seating areas are permitted in the subject zoning district and are not under consideration in the subject scope, the musician area complements new seating areas officially proposed to be established for the restaurant under this request.

- b. **Whether the application will preserve any city, state or federally designated historic, scenic, archaeological, or cultural resources;** *There are no known historic, archaeological or cultural resources in the area. The property's waterfront has historically been used by guests for mooring and dining on the water, and that intent is not changing under this application. The deck cover is temporary as permanent roofs are not permitted over the water in the subject zoning district. While no new work is proposed to establish this area, should the owner pursue seating deck expansion in the future, they are put on notice that should any resources be discovered during the work proposed, the City shall be informed.*
- c. **Whether the application will be compatible with adjacent development, if any, based on characteristics such as size, building style and scale; or whether such incompatibilities are mitigated through such means as screening, landscaping, setbacks, and other design features.** *Staff finds the application to be compatible with adjacent development. The proposed seating deck area extends less than half of the distance into the water as the neighboring restaurant building to the immediate south, and the view of the seating area is substantially masked from the properties north of Vina Del Mar Bridge due to structural bridge supports and the subject property's existing enclosed patio seating area immediately adjacent the bridge. The tent is not found by staff to be a significant hindrance to the viewshed of any adjacent property.*
- d. **Whether the application will have significant adverse impacts on the livability and usability of nearby land due to noise, dust, fumes, smoke, glare from lights, late-night operations, odors, vehicular traffic, truck and other delivery trips, the amount, location, and nature of any outside activities, potential for increased litter, or privacy and safety issues.** *Staff finds that there is no expected additional impact from dust, fumes, smoke, glare, odors, or traffic. Staff is concerned about potential waterway litter resulting from the use of disposable tableware, and suggests as a condition of approval, that the restaurant provide only reusable tableware to the deck area as long as it is used for dining.*

Staff has concerns regarding the potential sustained noise increases resulting from the outdoor music use, particularly from amplification in later hours of the day, and recommend conditions to mitigate potential nuisance to nearby residential receiving properties. The intent of proposed conditions is to inhibit

the potential for raucous noise from the property over the substantial period of time the applicant is requesting for outdoor music to be played, especially during later hours of the day where commercial noise may be at greater odds with the quiet enjoyment and character of nearby residential properties, as well as to promote health and the general welfare. Staff proposes these conditions in recognition that consistent playing of amplified music with bass or other amplification, of such a consistent or impulsive decibel level to be considered raucous, could potentially represent a nuisance to the surrounding community.

- (3) Whether the transportation system is capable of adequately supporting the proposed use in addition to the existing uses in the area. Evaluation factors include street capacity and level of service, access to arterials, transit availability, on-street parking impacts, if any, site access requirements, neighborhood impacts, and pedestrian safety; This proposal is not anticipated to create any new impacts on the road system or cause any conflicts with site access.**
- (4) Whether the minimum off-street parking area required and the amount of space needed for the loading and unloading of trucks, if applicable, will be provided and will function properly and safely; This proposal for outdoor music is not anticipated to affect on-site parking areas. Regarding requirements generated by the dining deck, staff have calculated the parking available on the site as well as its remote lot across Pass-a-Grille Way to be sufficient to support the needed additional nine parking spaces. However, due to recent sitework, the applicant has produced two parking spaces at the western front of the building that are not of sufficient depth to meet code requirements, and possesses an accessible space that does not appear to comply with accessibility requirements. Staff is requesting both of these issues to be rectified through the conditions of this case.**
- (5) Whether generally, the public health, safety and welfare will be preserved, and any reasonable conditions necessary for such preservation have been made; Staff propose conditions related to prohibition of outdoor music amplification except during specified days and hours, limited hours of operation during weekdays, maximum sound levels, instrument limitations, and artist limitations to mitigate potential impacts on surrounding properties.**
- (6) Whether the applicant has demonstrated the financial and technical capacity to complete any improvements and mitigation necessitated by the development as proposed and has made adequate legal provision to guarantee the provision such improvements and mitigation; There are no site improvements anticipated to implement this request. The outdoor dining deck has already been constructed.**
- (7) Whether the proposed use complies with all additional standards imposed on it by the particular provision of these regulations authorizing such use and by all other applicable requirements of the regulations of the City of St. Pete Beach. The request is governed under the city's noise ordinance outside of any additional conditions placed on the request under this scope.**

The following three additional criteria are evaluated when an outdoor dining and drinking area with amplified music is proposed to be established:

(8) The product specifications of any permanent speakers, amplifiers and other support equipment to be installed outdoors.

The owner states that all visiting musicians currently bring their own speakers and amplification equipment. Staff are requesting, as a condition of approval, that no outdoor amplification be permitted except during hours in which the property hosted outdoor musicians prior to the implementation of the city's outdoor music use limitation, and that all amplification occur through permanent equipment with sound governing hardware or software to ensure that decibel limitations are adhered with.

(9) An explanation of the hours of operation of the outdoor dining and/or drinking area, including any special provisions or intentions for live music.

The owner has requested specific hours of approval for live music. Amplified live and recorded music are treated the same and both require a conditional use permit. Staff are recommending that hours for live music be limited to those requested by the owner as of their initial submittal, and that hours of amplified music be further limited, to provide for the general peaceful enjoyment of residential properties across the waterway.

(10) A description of how music will be regulated in accordance with the City's noise ordinance as found in Chapter 46, Article IV of the Code of Ordinances.

The owner is not proposing to offer live music outside of the hours at which 65 dBA is the allowable receiving decibel level at any property, except in cases of special events. Staff are recommending the owner be required to adhere with the hours initially proposed, and are requesting an additional ten decibel level reduction in maximum receiving level at residential properties, to ensure reasonable quiet enjoyment of nearby residences.

STAFF RECOMMENDATION

It has been determined that the reviewing body (City of St. Pete Beach City Commission) is empowered under the LDC to grant a conditional use permit for application 23034.

Request #1- Dining Deck

Staff finds that granting this request as proposed will not adversely affect the public interest, and would be generally compatible with adjacent properties and other properties in the district provided the conditions as proposed by staff are adhered to. As such, staff recommends approval of the Conditional Use for the Class A commercial dock expansion. Should the City Commission grant the Conditional Use, the application should be subject to the following conditions as are subject to the request:

1. Tableware, to include plates, cups, utensils, napkins and tablecloths that are served or made available in the dining deck area, shall be reusable.

2. Within two months of the issuance of the development order for this request, the applicant shall modify the parking area to create two accessible parking spaces that meet state requirements for a business offering 26-50 parking spaces. They shall also modify the two parking spaces shortened by recent pole sign renovations to be made available for golf carts, motorcycles, or other appropriately-sized vehicles only, and signage shall be installed or stamped on the asphalt to that effect.

Request #2 - Outdoor Music

Staff finds that granting this request as originally proposed would adversely affect the public interest, and would not be compatible with adjacent properties and other properties in the vicinity, due to the potential for prolonged raucous noise resulting in nuisances and incompatibilities with surrounding land uses. As such, staff recommends modification to the original request for a Conditional Use for live outdoor music. Should the City Commission grant the Conditional Use, the application should be subject to the following conditions as are subject to the request:

3. Except as provided in condition #8, only acoustic string instruments shall be permitted to be played in the outdoor areas of this property. "Outdoor areas" for the purpose of these conditions shall be defined as any area within the property boundary or adjoining submerged land outside of the approximately 60x49' walled restaurant, specifically including any open porch areas, but excluding any future additions that are roofed and enclosed along all sides by a solid wall and windows from floor to ceiling.
4. Except as provided in condition #8, any acoustic string instrument played in any outdoor area shall be unamplified. "Unamplified" for the purpose of these conditions shall be defined as lacking any kind of separate equipment, including but not limited to speakers, amplifiers, or any kind of permanent or handheld device, used to increase the decibel level of an instrument above that created by in-body vibration due to strumming, bowing or plucking of the instrument.
5. Except as provided in condition #8, no external amplification equipment may be installed or operated to pipe music from the indoor area into the outdoor areas of this property, or to amplify any outdoor music, including voice or instruments. Any amplification equipment installed indoors to support amplified indoor music shall be oriented toward the interior and not be located outdoors or be oriented to pipe amplified music outdoors.
6. Permitted hours for the playing of acoustic outdoor music are as follows:

Wednesday – Friday:	5–10 PM
Saturday:	12–4 PM & 5–10 PM
Sunday:	11 AM–3 PM & 4–10 PM
7. Outdoor music shall not exceed the following decibels at any hour in which music is permitted:

Ten feet from any outdoor speaker installed on the property: 70 dBA

The property line of any receiving residential property: 55 dBA

The standards above are in addition to those specified in the Code of Ordinances.

8. Between the hours of 12 PM and 3 PM each Saturday and Sunday, the applicant shall be permitted to play amplified outdoor music. All amplified music shall come from permanent speakers installed on the property that are oriented toward the property and away from nearby residences to the north and east, and equipped with sound limiting equipment to ensure that decibel standards listed in condition #7 can be adhered with. Equipment product specifications and a layout plan must be provided to staff prior to installation. Equipment shall produce no bass. Instruments shall be limited to string instruments unless otherwise approved by the city manager. Under no circumstances shall the playing of acoustic drum sets or percussive instruments that repetitively produce similar impulsive sounds be permitted without amendment of this conditional use permit by the City Commission.
9. All outdoor musical artists and bands shall be limited to the tented area as shown on the site plan.
10. The tent placed over the outdoor music area shall be no larger than 10 x 10 feet in size. Upon issuance of a tropical storm or hurricane warning, the tent covering the musician area shall be removed and safely stored indoors. The tent shall be inspected by the building and fire officials, if necessary, to determine compliance with the building and fire codes.

General Conditions

11. Any violation of the above-stated conditions will allow the City Commission to rescind or modify the Conditional Use Permit.
12. The City Commission may review the Conditional Use Permit periodically to determine whether the order is in compliance with the terms and conditions herein.

Rita Bishop

From: mohollandba@gmail.com
Sent: Tuesday, August 8, 2023 12:20 PM
To: City Attorney; Alex Rey
Cc: Chris Marone; Adrian Pettila
Subject: TRC/CUP 2007 Pass-A-Grille Way Red White and Booze(RWD)

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Gentleman

It came to my attention this morning in reviewing the agenda for tomorrow's TRC meeting that a new item has been added to this CUP request. It seems as if a permit was requested, and approved, for two dock expansions. However, the real intended use was for a Class A over the water drinking, eating and party deck. As one of the most affected neighbors of this establishment, I feel this CUP application should be a separate one from the request to continue playing loud music. These requests being combined reduces my available time to make public comments on two separate infringements on my privacy, quality of life, environmental factors, and property values.

I'd appreciate your attention to this matter.

Owen "Joe" Moholland
199 and 189 21st Ave.



Virus-free. www.avg.com

From: [Maria Kennedy](#)
To: [City Attorney](#); [Alex Rey](#); [Amber LaRowe](#); [Brandon Berry](#); [Jennifer Ledford](#)
Cc: [Chris Marone](#); [Peyt Dewar](#); [Adrian Pettila](#); [maria kennedy](#)
Subject: Conditional Use Permit Case No. 23034 [Red, White & Booze]
Date: Monday, August 28, 2023 6:28:48 AM
Importance: High

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Greetings,

The application for the Red, White & Booze conditional use permit (CUP) # 23034 did not include any information about **amplified** or **piped** music on their outdoor deck. The public hearing notice also omitted this detail. However, the city ordinances require a detailed noise management plan and a copy of the sound system specifications and noise mitigation measures for any request involving amplified or piped music on an outdoor space.

I feel the application was written vaguely to get approved. Not unlike the erroneous permit authorized for the 'two dock extensions', that were actually for a full blown eating and dining area with added musician tent. Or, on the guise of being "grandfathered", playing music at volumes never before heard for 5 or 6 days a week.---'Grandfathered' would have meant limiting the days to weekends and low volume so as not to produce noise pollution for the surrounding neighbors.

According to the City Ordinances, requests to play music on an outdoor area should have a detailed plan for noise management, as well as a copy of the sound system specifications and any noise mitigation measures that are already implemented.

The RW&B owners want to have the musicians bring their own amplifiers; is this how they will get around having to have controls in place, by putting the responsibility on each musician?

MUSIC: volume, frequency and control....it is all that is asked to not have continued adverse effects on the surrounding neighbors.

Best Regards,
Maria F. Kennedy
Vina Del Mar
571-330-2783

Brandon Berry

From: rickhiggins123@gmail.com
Sent: Wednesday, September 6, 2023 4:39 PM
To: Adrian Petrilă; Chris Marone; Mark Grill; Ward Friszolowski; Christopher Graus; Alex Rey; Brandon Berry; Amber LaRowe
Subject: Conditional Use Permit Case No. 23034. Red, White and Booze

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Ladies and Gentlemen:

I write regarding the above permit application. I live at 107 21st Avenue, three houses away from Red, White and Booze. As with many of my neighbors, I urge the denial of the above application.

While, as you know, there is a commercial node at 21st Avenue and Pass-a-Grille Way, the neighborhood to the north and west of Red, White and Booze is residential. The playing of music at all hours seven days a week cannot but impact the quiet enjoyment of those of us nearby. Have any sound studies been done to determine the volume that we will have to listen to whether we want to or not? The current owner bought this property without entitlement to playing music at this venue and now seeks to do so no matter what the impact on the community. It is hard to imagine why a successful restaurant that has been in this location for years without live music now needs live music to survive. If it is not a matter of survival (which, I submit, it is not), then the City should not be in the business of allowing extra profits to a business when the negative impact on the neighborhood is clear.

Thank you for your consideration.

Richard Higgins

From: [Brenda Greene](#)
To: [Brandon Berry](#)
Cc: [Kristin Coman](#)
Subject: Re: CUP 23034
Date: Friday, July 7, 2023 3:23:40 PM

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Thanks for those details, Brandon, and to Kristin for forwarding my message. I did not see the original message about the rescheduling of the hearing (I saw the date on the sign outside RWB). Are you able to put me on the mailing list, because I will be attending the next meeting in opposition for sure.

Best,

Bren

Brenda L. Ross-Greene (she/her)
St. Pete Beach, FL
(727) 238-1688

"Our greatest weakness lies in giving up. The most certain way to succeed is always to try just one more time." Thomas Edison (1847-1931)

On Friday, July 7, 2023 at 02:26:44 PM EDT, Brandon Berry <bberry@stpetebeach.org> wrote:

Brenda,

The request under CUP 23034 was for the ability to play outdoor music on their outdoor dining deck. The request was originally to play Wednesday through Sunday for various hours between late morning and nighttime, but the application was amended last week to request the ability to play seven days a week between 11a and 10p. The musicians would be hosted under a ten-by-ten foot tent on their dining deck.

The application for the CUP needs to be amended and will not be heard at the July 11th meeting. I do not

yet know when it will be rescheduled, but if you received a notice for the July 11th meeting, you will also receive one for the rescheduled meeting as we will be readvertising.

If you need any additional information please let me know.

Sincerely,

Brandon

From: Brenda Greene <brendalauragreene@yahoo.com>
Sent: Friday, July 7, 2023 1:21:03 PM
To: Kristin Coman <kcoman@stpetebeach.org>
Subject: CUP 23034

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Hi Kristen,

I left you a VM today, and I'm sending this follow up email. Can you please tell me what RWB is asking for in their application for a CUP 23034?

I have concerns about amplified music being played at that location or music being played more days than already allowed and want to understand what they have requested.

I will not be able to attend the meeting on 7/11. Are you the person I should send an email to if I object to their request? Thanks for your assistance.

Bren

Brenda L. Ross-Greene (she/her)

306 S. Tessier Dr.

Vina del Mar

St. Pete Beach, FL

(727) 238-1688

Bren

Brenda L. Ross-Greene (she/her)

St. Pete Beach, FL

(727) 238-1688

"Our greatest weakness lies in giving up. The most certain way to succeed is always to try just one more time." Thomas Edison (1847-1931)

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All government correspondence is subject to the public records laws.

From: [Kenneth Hysell](#)
To: [Brandon Berry](#)
Subject: Re: RWB Music Violation August 9, 2023 Part 2
Date: Thursday, August 10, 2023 8:51:47 AM

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Yes, exactly! You can set the decibel level to the highest level allowed and then lock the box which can only be opened by code enforcement or PCSO. We are aware that other cities have had similar problems with annoying, loud, and raucous noise, and this was one of ways they could control the owners and musicians from turning up the volume. Another way they controlled the volume was exactly what the city did with hotel Zamora and that was snot to allow musicians to bring in outside amplifiers and equipment that they could raise the volume independently of the owner. Thanks

Sent from my iPhone

On Aug 10, 2023, at 7:54 AM, Brandon Berry <bberry@stpetebeach.org> wrote:

Thank you Ken. By lock box are you referring to a decibel limiting device?

From: Kenneth Hysell <rjhysell@tampabay.rr.com>
Sent: Thursday, August 10, 2023 7:24 AM
To: Brandon Berry <bberry@stpetebeach.org>; Jennifer McMahon <rddirector@stpetebeach.org>; Peyt Dewar <pdewar@stpetebeach.org>; Chris Marone <cmarone@stpetebeach.org>
Cc: rjhysell2032@gmail.com
Subject: RWB Music Violation August 9, 2023 Part 2

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Good Morning - We just wanted to share with you all one more video from another neighbor who lives over 500' away from RWB. He took this video around 9pm which is over two hours from the first video taken at 6:47pm

We think this shows that a "lock box" for all music at RWB would be warranted this control the volume. Why? Because we observed RWB staff checking outdoor speakers last night and the musician simply adjusted the volume on his own amplifier which was piped outside.

Thanks,

Ken

Sent from my iPhone

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From: [Kenneth Hysell](#)
To: [Brandon Berry](#)
Cc: rjhysell2032@gmail.com
Subject: Re: RWB Music Violation
Date: Tuesday, August 8, 2023 7:39:21 PM
Attachments: [Video.MOV](#)
[Video RWB Owner 07212023.docx](#)

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Hi Brandon,

Please see attached video of RWB musician playing inside the restaurant. When you watch the video you can hear him playing because it's being piped to the outside speakers. The video scans from left to right and stops on the owner as he confronts us taking the video from the Vina bridge after we got a decibel reading over 67dBs. We never spoke to the owner before, during, or after the video was taken. The second document is a summary of what transpired that evening and a verbatim transcription of the video.

I texted Peyt a couple times about the live amplified music being played inside and being piped outside but he never got back to me. I figured you all are so overwhelmed with work that I didn't want to bother him.

Sincerely,

Ken

Sent from my iPhone

On Aug 8, 2023, at 6:26 PM, Brandon Berry <bberry@stpetebeach.org> wrote:

Ken,

Yes, please send the video. Have you contacted Code Enforcement about these instances now that they have moved the musician area?

Sincerely,
Brandon

Get [Outlook for iOS](#)

From: rjhysell@tampabay.rr.com <rjhysell@tampabay.rr.com>
Sent: Tuesday, August 8, 2023 4:39:07 PM

To: Brandon Berry <bberry@stpetebeach.org>; rjhysell2032@gmail.com
<rjhysell2032@gmail.com>
Subject: RWB Music Violation

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Hi Brandon,

I'm sending this email to you one more time to make sure that it went through because it doesn't show on my end as being sent.

I know that you will be attending the TRC tomorrow morning and I wanted to make sure you were aware that as of July 16, 2023, RWB has moved their live amplified outdoor music inside the restaurant.

However, since that date, RWB has been "piping" their live inside amplified music outside to the outdoor speakers in the patio and new dock areas.

According to your email response to Charles Collom dated April 15, 2023, at 5:15pm, you stated the following, **"If your acts play inside and the music is not piped out of the restaurant through speakers, and the noise ordinance is otherwise followed, conditional use approval is not required."** These constant and contemptuous actions by RWB seem to be in direct violation of the city's guidance and we (PAG and VDM residents) were hoping that the city, code enforcement or the PCSO would stop this loud and raucous activity from happening until the CUP hearing in September.

All we're simply asking for from the city is to provide us relief and not be subjected to loud and raucous amplified music from RWB that does not even have a permit to "pipe" live amplified music from inside the restaurant to the outside seating and dining areas.

We have video evidence of this event that depicts the musician playing live amplified music inside, the inside music being "piped" to the outside speakers, and the owner of RWB being present and making obscene gestures and obscenities to us. If you would like a copy of the video and transcript, please let me know and I'll send them to you.

Thanks,

Ken Hysell

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From: [Maria Kennedy](#)
To: [Peyt Dewar](#); [Chris Marone](#); [Brandon Berry](#)
Cc: [maria.kennedy](#)
Subject: Red, White & Booze Loud, Amplified Music
Date: Wednesday, August 9, 2023 7:24:35 PM

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Good evening, gentlemen.

I write this completely frustrated by the intrusion, yet again, of the amplified music coming from the Red, White & Booze Bar and Grille, 2007 Pass-A Grille Way, St Pete Beach.

The musician is playing from indoors, but the amplified music is being broadcast on several outdoor speakers at an unrelenting volume. Since shortly after 5 pm, this has been non-stop.

I live at 199 21st Ave, just across the Vina del Mar Bridge. I shouldn't have to be subjected to this noise level every single day except Monday's and Tuesdays (and then only if it is not a holiday). Not certain what is going to be done about this, Code Enforcement seems to have their hands tied, the Sherriff's Dept. is easily visible and the parking attendant notifies the "inside staff" whenever he spots them coming down the street.

This is not sustainable. If the owner wants Amplified Music, it should be on "in-house" equipment that has a governor of sorts to ensure the volume levels are not exceeded. Reminder, this Bar and Grill sits over water; all noise levels (to include conversations along with any music), are already amplified by the surrounding environment...outside speakers are not needed in a neighborhood that is 99.99% residential.

Please help us. This has been going on for months. The owner believes he is 'untouchable', and suggests we can move. That is not what anyone wants. We just want peace and quiet while inside our homes. Yes, we stay inside, because outside the noise is worse.

Best regards,
Maria F. Kennedy
Vina Del Mar
571-330-2783

Brandon Berry

From: Peyt Dewar
Sent: Monday, June 5, 2023 5:19 PM
To: Brandon Berry
Cc: Michelle Gonzalez; Jennifer McMahon
Subject: FW: Red White Booze Code Enforcement Permission

Fyi.

From: Danielle T <danielletrz@gmail.com>
Sent: Monday, June 5, 2023 4:54 PM
To: Peyt Dewar <pdewar@stpetebeach.org>; Steven Rivera <srivera@stpetebeach.org>; Mom 4:12pm <marytrz@hotmail.com>; Richard Trzcinski <Richard@primericagroupone.com>; rjhysell@tampabay.rr.com
Subject: Red White Booze Code Enforcement Permission

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Hey Peyt and Steven,

My name is Danielle Trzcinski and I am writing on behalf of my family Mary and Richard Trzcinski (ccd here) at 2013 Pass a Grille Way. We have been directly and adversely impacted by the music coming from Red White and Booze. It gets so loud we can often hear it INSIDE our home which has negatively impacted our quality of life.

I am writing this email to give permission to code enforcement to come to our property's seawall at 2013 Pass a Grille Way to take decibel readings from Red White and Booze's music from now til June 27th.

I have unlocked the left gate so you can enter the back of the property on the northern side of the house walkway and through the white gate if we are not home. But as a courtesy (and so we'll know you are not a stranger trespassing), please give a heads up when you will be doing readings at our property by calling or texting me before at **813-598-1887**.

Thank you so much and please let me know if you have any questions!

Sincerely,

Danielle
813-598-1887

Brandon Berry

From: Mickey Parsons <mickey@mickeyparsons.com>
Sent: Tuesday, June 13, 2023 9:51 AM
To: Brandon Berry; Chris Marone
Subject: Case 23034

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Hello Commissioner and Brandon — thanks for the notice on case 23034 about music permit for red/white/booze [Formerly Sea Critters Cafe]—

We own the home directly behind the Fire and Rescue Station and would support music allowed until 8 PM nightly - perhaps til 10 PM on holidays like Independence Day, NYE, etc... but any later would disrupt our home life and neighbors with young children, as well as those of us that work a traditional 8 AM - 6 PM schedule.

I hope to attend the 27th meeting, but wanted to also document my thoughts via email. Thanks for your representation!

Many thanks,
Mickey
Mickey Parsons, Michael Prince
102 20th AVE, SPB

An Imperfect Mobile message from Dr. Mickey Parsons, 727-222-0514

Brandon Berry

From: Julie Haura <julie.haura@gmail.com>
Sent: Monday, June 19, 2023 4:11 PM
To: Brandon Berry
Subject: Comments for Permit Regarding Amplified Music at "Red, White, and Booze" Restaurant

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Dear City of St. Pete Beach Planning Department

I hope this email finds you well. I am writing to express my concerns regarding the recent permit filed by the restaurant "Red, White, and Booze" to establish an area for playing amplified music on their existing outdoor dining and drinking deck. As a resident living approximately 500 feet away from the restaurant, I have experienced firsthand the negative impact of their current music practices, and I strongly disagree with granting them a permit to continue with amplified music.

While I appreciate live music and the vibrant atmosphere it can bring, the music played at "Red, White, and Booze" has consistently exceeded reasonable sound levels and disrupted the peace of nearby residents. It is not an exaggeration to say that the noise has become a constant source of disturbance in our everyday lives. The live musicians perform almost every weeknight and throughout the day and night on weekends and holidays, all with the aid of amplifiers.

Even when I retreat to the interior of my house, with hurricane-rated impact resistant Anderson doors and windows securely shut, the music remains clearly audible. In order to escape the noise, I have resorted to seeking refuge in my remote bedroom and using fans to create background noise, which is far from an ideal situation. Despite not possessing a decibel meter, I can confidently state that the music is excessively loud and disruptive.

It is essential to consider the proximity of the restaurant to residential areas. Surrounding the establishment are numerous residences whose inhabitants should not be subjected to such prolonged disruption for a significant portion of their day and night. On a positive note, I recently experienced one evening where no music was playing, and I was able to enjoy the serenity of my back porch, listening to the soothing sounds of the wind and waves rather than the intrusive noise from the restaurant.

I kindly request that the City of St. Pete Beach reevaluates the situation and refrains from granting the permit for amplified music at "Red, White, and Booze." Instead, I implore the authorities to enforce a more reasonable non-amplified sound volume and restrict the frequency at which any music, even if not amplified, can be played. By implementing these measures, the city can strike a fair balance between supporting local businesses and preserving the quality of life for nearby residents.

I appreciate your attention to this matter and thank you for considering the concerns of the affected residents. It is my hope that the city and county will take appropriate actions to address this issue and ensure a peaceful coexistence between the restaurant and the surrounding community.

Thank you for your time and consideration.

Sincerely,
Julie Haura
2072 W Vina Del Mar Blvd

Brandon Berry

From: Eric Haura <eric.haura@gmail.com>
Sent: Saturday, June 24, 2023 2:52 PM
To: Brandon Berry
Subject: Conditional Use Permit Case No. 23034 (Res 2023-018) PAG Way

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Hello

I write in strong objection to permitting Charles and Helen Collom to play amplified music on their dining and drinking deck

I have lived at 2072 W. Vina Del Mar since 2018.

We bought this house in part because of the quiet neighborhood

This establishment plays excessively loud music multiple days a week and I have experienced playing loud amplified music beyond their typically 9pm "stop" times

We cannot sit outside on our deck and enjoy the peace and quite that we have savored living in this community

There should be no allowance for this public nuisance in a neighborhood dominated by single family homes

There are plenty of opportunities for customers to enjoy amplified music in the north of the Don Cesar establishments.

Please do not allow this permit to move forward. It would be a step to start to destroy the neighborhoods of VDM and PAG

Sincerely,

Eric Haura

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Brandon Berry

From: Timothy Gibian <tkgibian@gmail.com>
Sent: Tuesday, June 27, 2023 11:42 AM
To: Brandon Berry
Subject: Re: Conditional use permit case no. 23034 (Res 2023-08)

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Dear Mr. Berry,

We are writing to express our strong opposition to the applicants' request for permission "to establish an area to play amplified music" as described in their application.

Our residence is just over the causeway bridge on 21st Ave. We have definitely noticed the applicants playing loud amplified music for months, multiple nights every week. Although our house faces away from the bar/restaurant the music is loud and intrusive. as the sound carries unimpeded over the water. What once was a tranquil and calm neighborhood has become loud and irritating. In essence we end up having to listen to an outdoor amplified concert almost every night. The idea that the applicants want to expand the hours of such music is too much. We believe the bar/restaurant music, because of its location directly adjacent to a residential neighborhood, has changed the area negatively.

We urge the city not to grant the applicants' request for a permit.

Tim Gibian and Kerri Hesley
Sent from my iPad

Brandon Berry

From: Amber LaRowe
Sent: Monday, August 14, 2023 7:18 AM
Subject: FW: Red White and Booze

Good morning,

Please see the comment below.

Thank you,
Amber

-----Original Message-----

From: Christopher Fuss <christopher.fuss@icloud.com>
Sent: Sunday, August 13, 2023 5:28 PM
To: Amber LaRowe <cityclerk@stpetebeach.org>
Subject: Red White and Booze

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Hello,

I'm just dropping a quick comment on the RWB noise issue. As a former resident of Vina Del Mar and lifetime resident of SPB (BCI now), I believe RWB should respect the request of the residents in the area and limit the noise from live music to a tolerable level for their neighbors.

Thank you!

Chris Fuss

Sent from my iPhone

Brandon Berry

From: Amber LaRowe
Sent: Monday, August 14, 2023 7:19 AM
To: Brandon Berry
Subject: FW: Sept. 11 City Council Meeting

FYI

-----Original Message-----

From: Tim Bechtold <skyhawkeye32@hotmail.com>
Sent: Sunday, August 13, 2023 12:21 PM
To: Amber LaRowe <cityclerk@stpetebeach.org>
Subject: Sept. 11 City Council Meeting

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Hi Amber, hope you week is getting off to a good one. I'm sending this note to make you aware I'm planning to attend the Sept 11 City Council meeting in support of the RWB conditional use permit discussion.

It was suggest I send a note for awareness.

Please let me know if any additional information is needed.

Thanks

Sent from my iPhone

Brandon Berry

From: Amber LaRowe
Sent: Monday, August 14, 2023 8:52 AM
Subject: FW: RWB

Good morning,

See public comment below.

Thank you,
Amber

-----Original Message-----

From: Liz Sinatra <easinatra@gmail.com>
Sent: Monday, August 14, 2023 7:59 AM
To: Amber LaRowe <cityclerk@stpetebeach.org>
Subject: RWB

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Hello, We live on Vina Del Mar and want to vote against allowing RWB to play any amplified music on any day of the week. We moved here because it was a quiet residential community and want to keep it that way. Allowing RWB to play loud music will affect or property value and change the neighborhood in a negative manner.

Thank you,
Scott and Liz Sinatra
250 Isle Drive
SPB, FL 33706

Brandon Berry

From: Richard Trzcinski <Richard@primericagroupone.com>
Sent: Tuesday, September 5, 2023 8:47 PM
To: Adrian Petrila; Chris Marone; Mark Grill
Cc: Ward Friszolowski; Christopher Graus; Alex Rey; Brandon Berry; alarowe@st.petebeach.org
Subject: FW: Conditional Use Permit case No. 23034. Red, White and Booze

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To the Leadership Group of the City of St. Pete Beach.

Hopefully, we have all survived the effects of Hurricane Idalia and can quickly return to the life we had.

On July 19th at the PAG Community Center I had the opportunity to hear from city leadership and the county sheriff office at a recent town hall meeting. I came away with appreciating how the leadership were concerned about the environment surrounding the PAG community.

It was recognized that Pass a Grille was a special historic place that should be treasured. That leadership recognized the quality of life we have here and the importance of maintaining that environment. Discussion ensued with traffic control, strict parking adherence, restricting public alcohol consumption, animal/pet control, preventing commercial enterprise overrunning the beach, controlling beach fire occurrence... etc. We in PAG are so fortunate in having one of the best beaches on the planet and can have all the general public share in its beauty.

So to the point why I am writing this email to you. You have before you a petition that threatens our quality of life and by right peaceful enjoyment of my home and property. As I understand it Red, White and Booze (RWB) has no rights, entitlement or vestiture to play live music let alone LOUD live music. This is not the Post Card Inn. This is not Gulf Blvd. Again, this is a historic, affluent residential neighborhood community for the most part retired and semi-retired. The impact of allowing RWB to play live music will adversely impact not only our quality of life but dramatically hurt property values. I was told that when neighbors had approached RWB about the noise issue they were told "You can move." To that I say -- Really! We have been here for decades with no music from your place of business and will be just fine without it. Especially when you bought the business you had no rights to playing music.

The intersection at 21st and PAG Way generates plenty of impact to the surrounding neighborhood presently. Now with the expanded dock system, added square footage of restaurant service - even more public traffic, noise and congestion will add to the areas impact.

I implore the leadership of St. Pete Beach to do the right thing and DENY the petition reference above.

Thank You for time and leadership.

Richard Trzcinski
2103 Pass a Grille Way
St. Pete Beach, Florida. 33706
Rtrzcinski@primericagroupone.com

Dear Commissioner,

I hope this letter finds you well. I am writing to bring to your attention a pressing issue that has been causing immense distress and inconvenience to the residence of our Pass A Grille community. Specifically, I would like to address the recurring problem of loud music played by Red White and Booze which has disrupted our peace and negatively impacted our quality of life.

For months now, our community has been subjected to the incessant noise caused by Red White and Booze. The volume levels are unbearably high, as is the number of days and hours music is playing. Red White and Booze is now up to playing live music five nights a week (35+ hours of loud music) which adversely impacts our noise pollution, quality of life, and peaceful enjoyment on our property. At times it is so loud we can hear it inside the house! We moved to Pass A Grille because it is a historic District which does provide an environment of peace and good tranquility, but with the blaring Loud Music from Red White and Booze, that is no longer the case. Despite constant noise complaints and policing, Red White and Booze continues to blast your music at obscene levels and beyond the hours they advertise. It is now impossible to sit on my back porch without hearing whatever music they decide to play.

This continuous disturbance that only affects the quality of life for residence but also undermines the reputation and desirability of our community as a whole. Visitors and potential homebuyers may be deterred by the lack of peace and tranquility, leading to a decline in our communities overall well-being as well as resale value.

Several attempts have been made to address the issue. In April 2023 the owner was notified to stop playing because he did not have a permit and yet his music continues to blare. He argued he was grandfathered in and the city told him he was not. He was told not to pipe any live amplified music from indoors to outdoors but continues and he has done so since July 2023. When he was told that neighbors have an issue with the noise level his response was, "They can move!" This behavior shows there is a complete lack of respect for rules, regulations or neighbors!

We have had two dates set for a hearing and it has been delayed, that's prolonging how long we have to put up with this. We respectfully request your immediate intervention to address this issue effectively and to set the hearing when most residents are back in town (Sept/Oct).

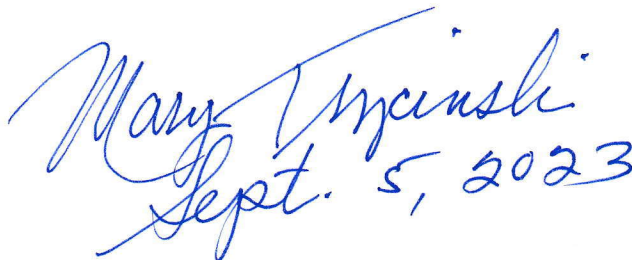
It is crucial that steps are taken to enforce noise regulations rigorously and ensure that those responsible for the disturbances faced appropriate consequences. Increased police presence, targeted patrols during live music hours, and proactive engagement with community members can go along way in determining such behavior and restoring peace to our peaceful Pass A Grille neighborhood!

I am willing to provide any additional information, participate in community discussions, or support your efforts in anyway possible.

Thank you for your attention to this matter. We trust in your commitment to upholding the peace, safety, and well-being of our Pass A Grille community, and we eagerly await your prompt action and resolving this ongoing issue.

Sincerely,

Mary Trzcinski
2103 Pass A Grille Way
Saint Pete Beach, FL 33706



Mary Trzcinski
Sept. 5, 2023

From: [Kenneth Hysell](#)
To: [Brandon Berry](#); [Jennifer McMahon](#); [Peyt Dewar](#); [Chris Marone](#)
Subject: RWB Music Violation August 9, 2023
Date: Wednesday, August 9, 2023 7:16:50 PM
Attachments: [Video.mov](#)

CAUTION: This message has originated from Outside of the Organization. Do Not Click on links or open attachments unless you are expecting the correspondence from the sender and know the content is safe

Good Evening Brandon,

Thanks again for letting my wife and I attend the TRC meeting this morning. We recall Peyt Dewar stated that RWB could not play live amplified music inside the restaurant and “pipe” it to the outside speakers.

Well, we have another crystal clear example of how the city is going to have a hard time approving and/or enforcing a CUP for RWB unless strict mechanisms are put in place that would prohibit this type of contemptuous behavior. Why? Because we have another video of this event that was witnessed by my family and two other neighbors.

We’re all at a loss of words at how disappointed we are with RWB especially after attending the TRC and hearing city staff tell them that they could not do exactly what they’re doing.

Thanks,

Ken & Rebecca Hysell

Sent from my iPhone

From: [Kenneth Hysell](#)
To: rjhysell2032@gmail.com; [Brandon Berry](#); [Jennifer McMahon](#); [Chris Marone](#); [Peyt Dewar](#)
Cc: rjhysell2032@gmail.com; [Kenneth Hysell](#)
Subject: RWB Music Violation August 10, 2023
Date: Thursday, August 10, 2023 9:18:02 PM
Attachments: [Video.mov](#)

CAUTION: This message has originated from Outside of the Organization. Do Not Click on links or open attachments unless you are expecting the correspondence from the sender and know the content is safe

Hi Brandon,

Just wanted to inform you and the city that me and the neighbors observed the owner of RWB from 5pm until approximately 7:40pm while live amplified music was being played inside the restaurant and then piped to the outside speakers.

We honestly hope that you and the city take into consideration what we all have had to endure from RWB while waiting for the CUP hearing. We all have maintained our respect and tolerance over the past six months for someone who obviously could care less about us or our beloved city of SPB.

Please see attached video from this evening and look forward to seeing you tomorrow.

Sincerely,

Ken

Sent from my iPhone

That's ridiculous. Music has to be amplified. It's impossible to play completely acoustic because the sound won't carry 5 foot in front of you.. if that worked every other bar in the area would be doing it. They know better than that.



You could never sing or play louder than a dinner conversation.



Message



John Kyle Rohde

[Sent from Yahoo Mail on Android](#)

Amplifiers are necessary to ensure the proper mix of volume between instruments and vocals. Also, without some amplification, the performers will not be heard over the volume of people speaking in the restaurant.

Phay Boucher



Does that work?

Yes..thank you so much..🙏



Message



Re: Meeting

From: Alice O'Connell (vtaoconnell@yahoo.com)

To: jimbradymusic@gmail.com

Date: Saturday, September 9, 2023 at 11:38 AM EDT

Thank You

[Sent from Yahoo Mail on Android](#)

On Sat, Sep 9, 2023 at 11:34 AM, Jim Brady
<jimbradymusic@gmail.com> wrote:

Playing acoustic music without amplification, is only possible in a controlled, quiet listening environment. Even then, it limits the performer to a certain dynamic of singing and playing that is difficult to do over extended periods of time.

The performer could actually do damage to their vocal chords trying to project their voice for several hours. The amplification with a sound system to aids in projecting the music, so the performer can engage with a relaxed style and not strain their voice.

It's truly not feasible or possible in reality, to play a bar or restaurant setting without amplification.

Jim Brady Music
JimBradyMusic@gmail.com



On Sep 9, 2023, at 11:20 AM, Alice O'Connell <vtaoconnell@yahoo.com> wrote:

Could you reply to this email stating why you have to play with "amplified" music opposed to playing "acoustic" ..just like a paragraph will do it and I'm gonna read them out loud at the Monday meeting..thank you and I'm so sorry to bother you yet again

[Sent from Yahoo Mail on Android](#)

Re: Music

From: duane worden (deweyjusnus@hotmail.com)

To: vtaoconnell@yahoo.com

Date: Saturday, September 9, 2023 at 03:04 PM EDT

The ambient crowd noise is at a level in which the performer cannot be heard except for perhaps the table or two right in front of him or her.

Get [Outlook for Android](#)

From: Alice O'Connell <vtaoconnell@yahoo.com>

Sent: Saturday, September 9, 2023 11:16:30 AM

To: Duane Worden <deweyjusnus@hotmail.com>

Subject: Music

Could you reply to this email stating why you have to play with "amplified" music opposed to playing "acoustic"..just like a paragraph will do it and I'm gonna read them out loud at the Monday meeting..thank you and I'm so sorry to bother you yet again..??

[Sent from Yahoo Mail on Android](#)

Re: Meeting

From: Charlie Imes (charlie@charlieimes.com)

To: vtaoconnell@yahoo.com

Date: Saturday, September 9, 2023 at 01:35 PM EDT

As a professional musician, I play a wide variety of song styles. Some require the vocals to be more soft & subtle, which just can't be heard more than 5 or 10 feet away in a busy restaurant. The same goes for the guitar work. I play many songs where I fingerpick, which isn't easily heard acoustically. Think of songs like the Beatles "Here Comes The Sun" or James Taylor's "Fire and Rain". Even with songs that are more upbeat, my voice wouldn't last 2 hours if I had to belt it out and project to be heard over any distance. Amplification makes quality performances possible and allows all customers to enjoy their favorite songs.

Charlie
619-972-9897
www.CharlieImes.com
charlie@charlieimes.com

On Sep 9, 2023, at 9:19 AM, Alice O'Connell <vtaoconnell@yahoo.com> wrote:

Could you reply to this email stating why you have to play with "amplified" music opposed to playing "acoustic"..just like a paragraph will do it and I'm gonna read them out loud at the Monday meeting..thank you and I'm so sorry to bother you yet again

[Sent from Yahoo Mail on Android](#)

amplification to A).

Accommodate the the size of the area and crowd I am playing to so that everyone can hear and enjoy the music.

Also, I use guitar and vocal effects processors to enhance and properly relay the songs to the patrons. Both of these enhance the listening experience for the

customers. Playing without amplification would seriously limit my abilities to properly deliver my music to the

Joe
Cantrell

Yes...although I play acoustic instruments they must be amplified in order for our customers to hear the guitars and vocals. If you check out any venue with live music and acoustic guitars there is always a sound system to amplify voice and guitar. Also since we have moved the music inside tips have decreased from 50-60%. It is because \sim^f where we are now local \downarrow inside.

mark Krasowski



**RESPECT AND TOLERANCE IN THE SUNSET CAPITAL OF FLORIDA
WHAT DOES IT MEAN TO BE A GOOD NEIGHBOR**





**VINA DEL MAR &
PASS-A-GRILLE
PRIVATE
PROPERTY
OWNERS**

43



**Yellow Star – Private
Property Owners Out-of-
State Unable to Contact**

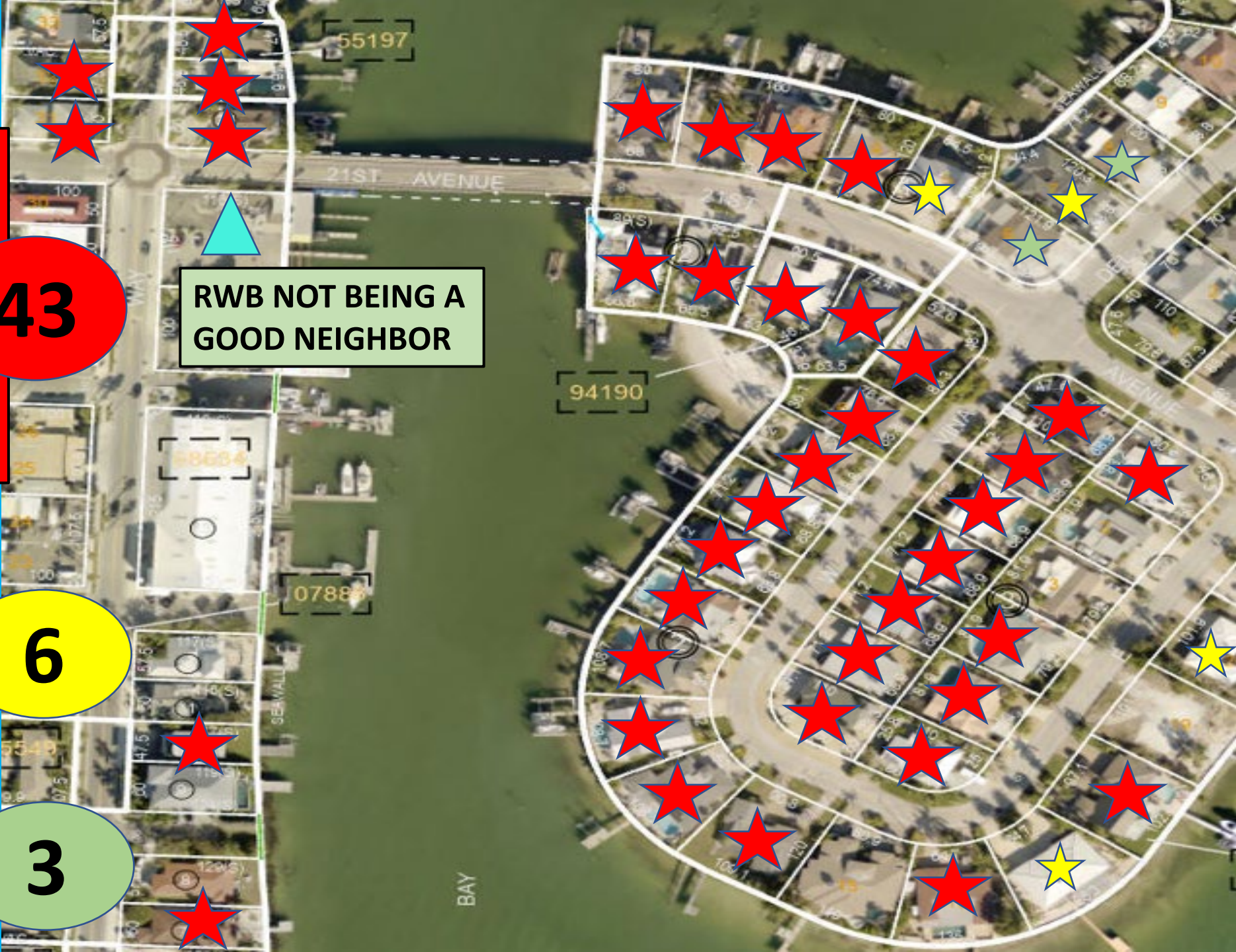
6



**Green Star – Private
Property Owned by RWB
Owner**

3

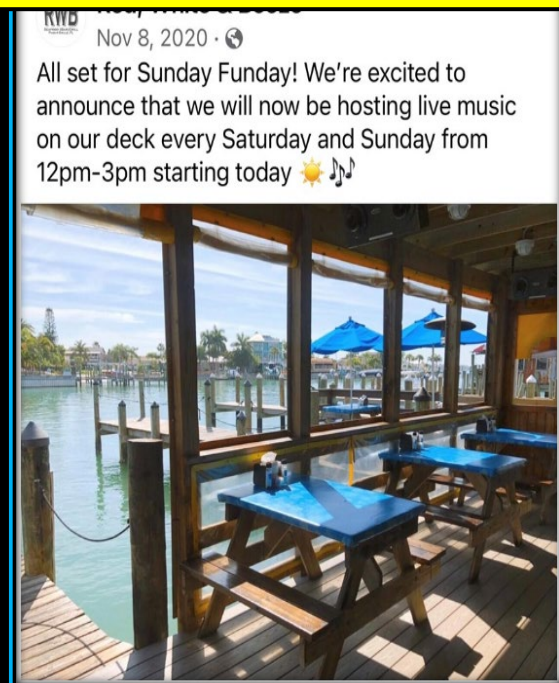
**RWB NOT BEING A
GOOD NEIGHBOR**



2010 - 2019 – NO LIVE MUSIC at SEA CRITTERS – WAS A GOOD NEIGHBOR

November 2020 – LIVE MUSIC at SEA CRITTERS

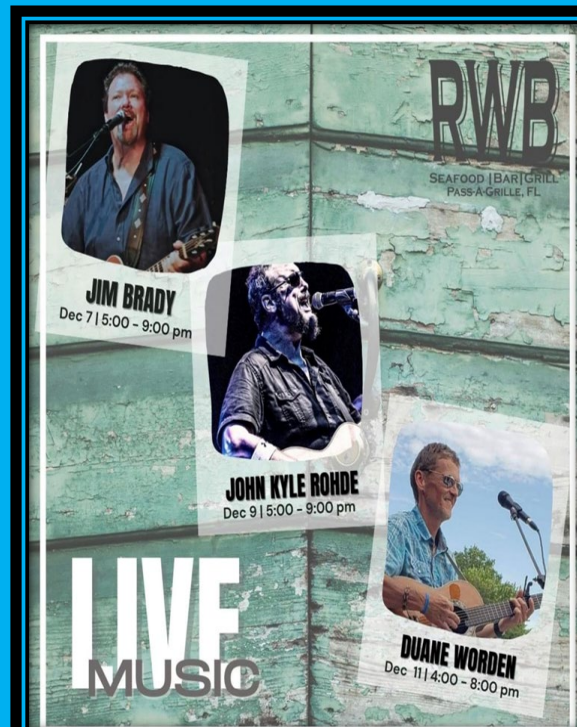
- Two Days - Saturday and Sunday 12-3pm
- NO CONDITIONAL USE PERMIT REQUIRED
- One Small Amplifier Used by Musician
- CONDITIONAL USE PERMIT REQUIRED AS OF DECEMBER 2020



COVID PANDEMIC PERIOD

March 2021 – LIVE MUSIC at SEA CRITTERS

- Three Days - Saturday and Sunday 12-3pm and Tuesday 5-8pm
- NO CONDITIONAL USE PERMIT ISSUED
- One Small Amplifier Used by Musician



COVID PANDEMIC PERIOD

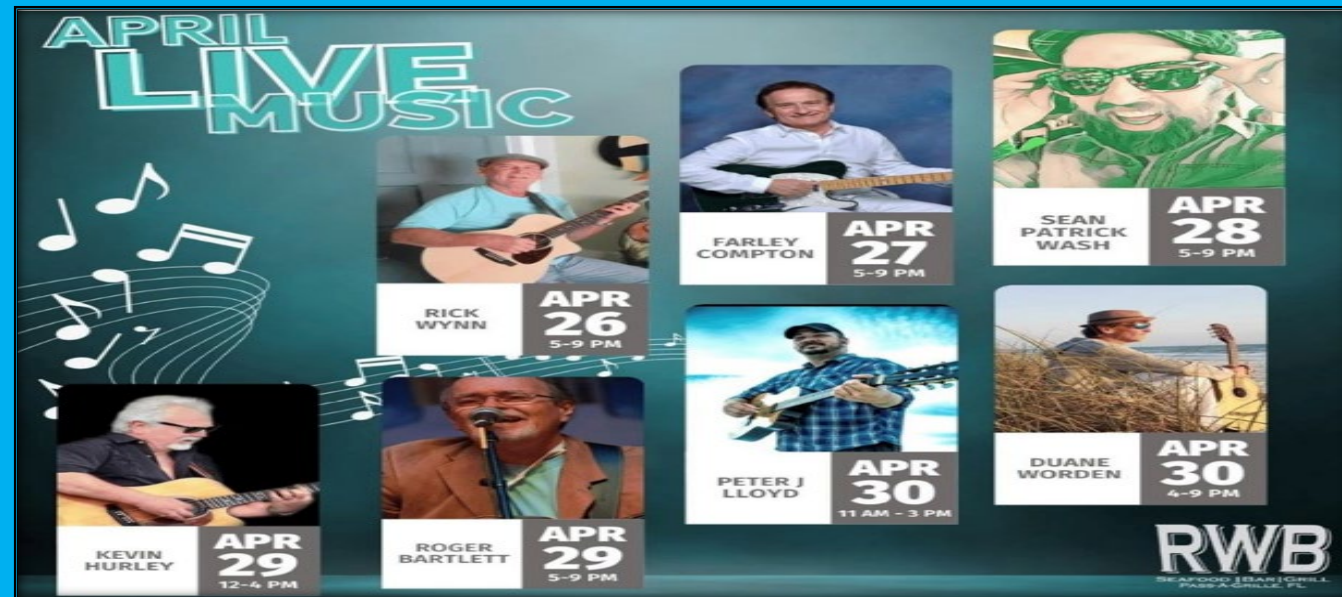
2022 – LIVE MUSIC at RWB – NOT A GOOD NEIGHBOR

- NO CONDITIONAL USE PERMIT ISSUED
- THREE DAYS OF LIVE MUSIC PER WEEK – 9 HOURS
- APRIL 2022 - NEW OWNER OF RWB AND THE LIVE MUSIC GOT LOUDER WITH LONGER HOURS
- VDM & PAG RESIDENTS TOLD THE OWNER AND STAFF THEY LIKED THE LIVE MUSIC AND ASKED IF THEY WOULD MERELY TURN IT DOWN
- THE OWNER'S RESPONSE WAS TO INCREASE THE LIVE MUSIC TO 5 DAYS PER WEEK WITH LONGER HOURS



2023 – LIVE MUSIC at RWB – NOT A GOOD NEIGHBOR

- NO CONDITIONAL USE PERMIT ISSUED
- FIVE DAYS OF LIVE MUSIC PER WEEK - 35 – 45 HOURS
- RWB OWNER RETALIATED AGAINST VDM and PAG RESIDENTS BY VERBALLY THREATENING THEM, PHYSICAL INTIMIDATION AND OBSCENE GESTURES
- RWB OWNER TOLD VDM AND PAG RESIDENTS THEY COULD MOVE IF THEY DID NOT LIKE THE MUSIC BECAUSE THE RESTAURANT WAS THERE FIRST



2023 – LIVE AMPLIFIED OUTDOOR MUSIC at RWB

- RWB REQUESTING TO PLAY 7 DAYS OF LIVE MUSIC PER WEEK – 77 HOURS**
- APRIL 2023 – CITY TOLD OWNER HE COULD NOT PLAY LIVE MUSIC WITHOUT A CUP – OWNER PLAYED ANYWAY**
- APRIL 2023 – CITY TOLD OWNER HE WAS NOT GRANDFATHERED IN TO PLAY LIVE MUSIC – OWNER PLAYED ANYWAY**
- MAY 2023 – CITY STAFF AND VDM & PAG RESIDENTS MET WITH OWNER TO DISCUSS LIVE MUSIC – OWNER LEFT THE MEETING TELLING RESIDENTS IF THEY DIDN'T LIKE THE MUSIC THEY COULD MOVE**
- JULY 2023 – OWNER RECEIVED A NOTICE OF VIOLATION FOR PLAYING LIVE MUSIC TOO LOUD – OWNER AGREED TO MOVE LIVE MUSIC INSIDE**
- JULY 2023 – OWNER PIPED LIVE MUSIC FROM INSIDE TO THE OUTSIDE – OWNER OBSERVED ON VIDEO MAKING OBSCENE GESTURES AND VULGAR STATEMENTS TO RESIDENTS**
- AUGUST 2023 – CITY TOLD OWNER AT TECHNICAL REVIEW COMMITTEE NOT TO PLAY LIVE MUSIC INSIDE AND PIPE IT OUTSIDE – OWNER TOLD THE CITY HE WOULD STOP**
- AUGUST 2023 – CITY TOLD OWNER AGAIN THAT HE COULD NOT PLAY LIVE MUSIC INSIDE AND PIPE IT OUTSIDE – OWNER TOOK ONE WEEK BEFORE HE COMPLIED WITH THE CITY REQUEST**

< John Kyle Rohde 🔍

 John Kyle Rohde is at Red, White & Booze. ...

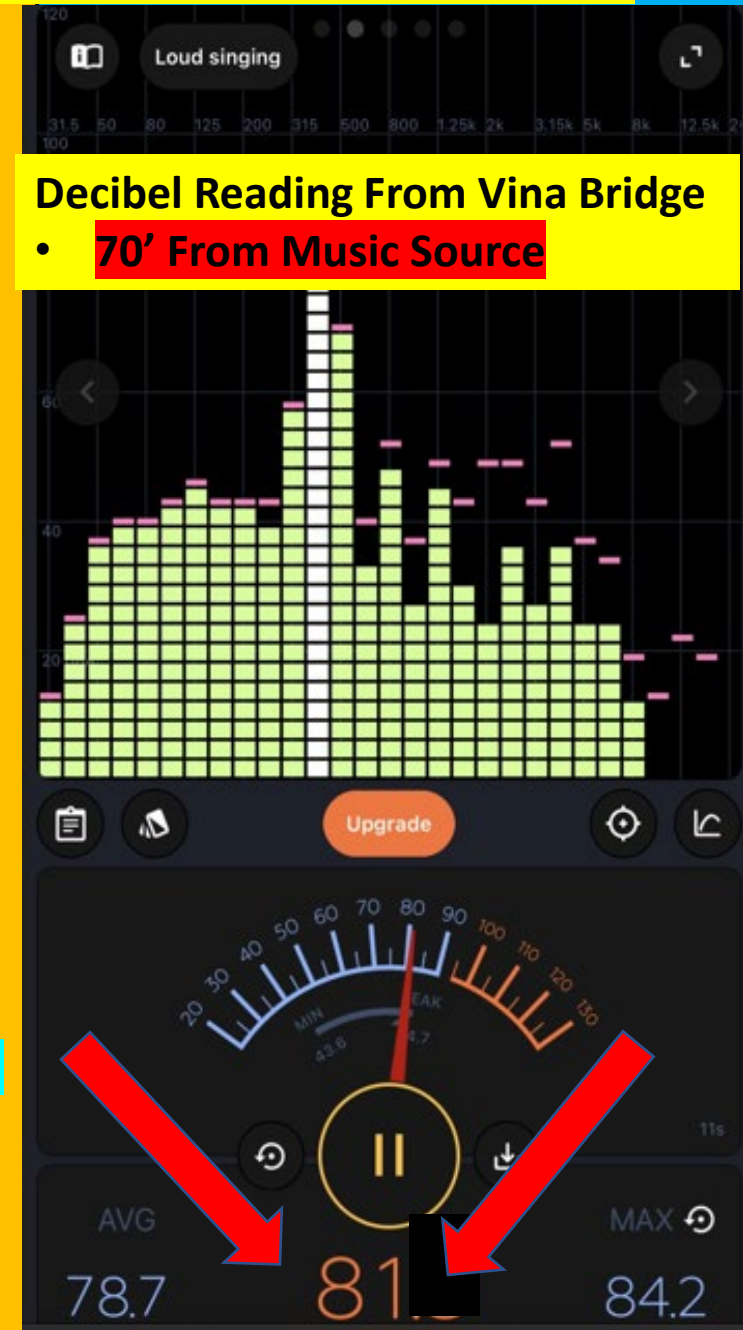
3d · St. Pete Beach · 🌐

Tonite, 5-9, I'm at Red White, & Booze on Pass-a-Grille, Sangin' and a Bangin on my guitar!! Y'all come hoot n holler! 🎵👑🌴🇺🇸❤️🍔🍷🍷



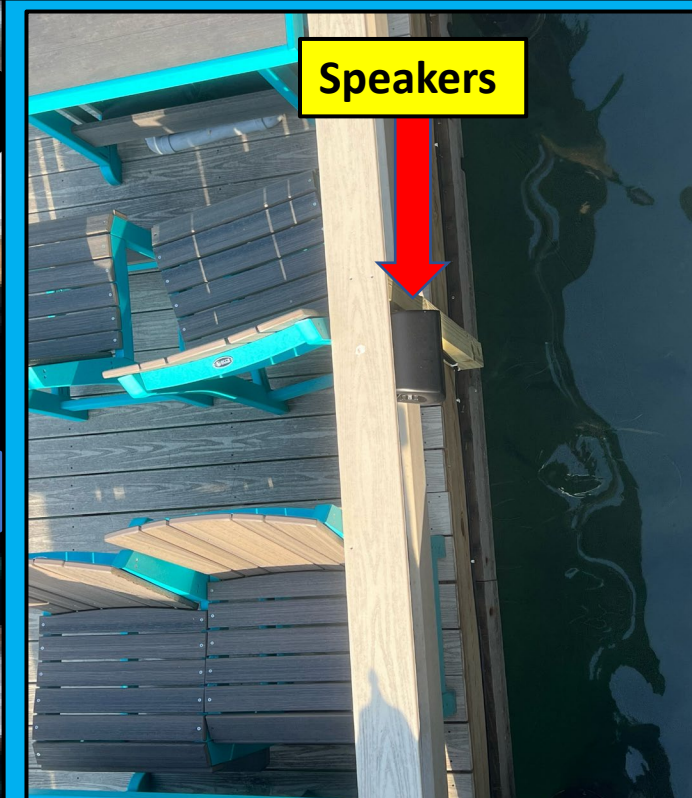
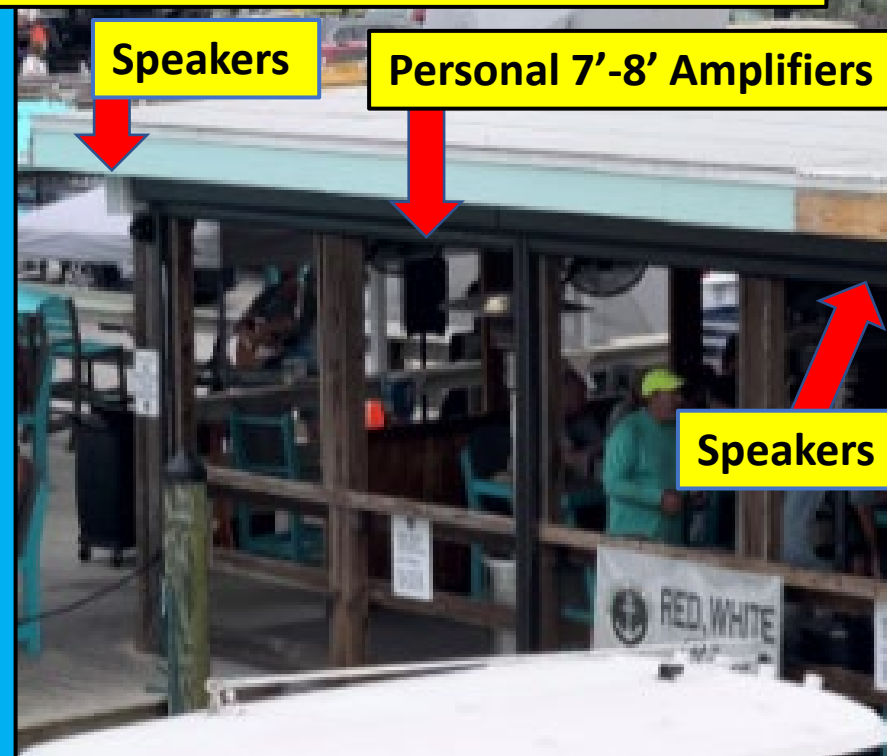
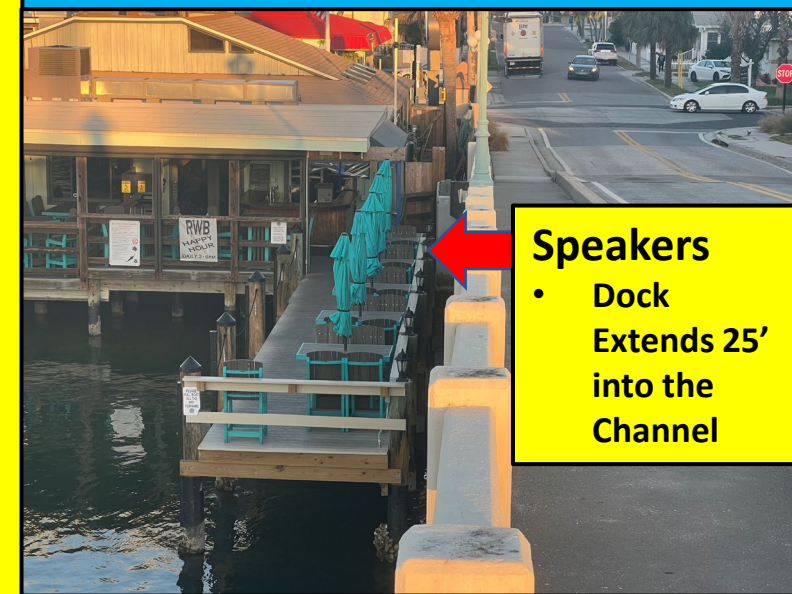
May 27, 2023 – LIVE MUSIC at RWB – Saturday 5pm – 9pm

- SPB CODE ENFORCEMENT TOOK A DECIBEL READING AT 81 dBAs 70' AWAY FROM THE SOUND SOURCE– THAT MAKES THE SOUND SOURCE OVER 90 dBAs AND OWNER TURNED THE VOLUME DOWN
- WHEN SPB CODE ENFORCEMENT AND PCSO DEPARTED – VDM RESIDENTS OBSERVED OWNER MAKING OBSCENE GESTURES TOWARD THEM
- THAT SAME NIGHT, PCSO TOOK ANOTHER DECIBEL READING FROM A VDM RESIDENCE LOCATED 492' AWAY FROM RWB AND THE DECIBEL LEVEL WAS ALMOST 60 dBAs – THAT MAKES THE SOUND SOURCE OVER 90 dBAs AND MEANS THE OWNER TURNED THE VOLUME BACK UP
- BOTH INCIDENTS WERE DOCUMENTED IN SPB NOISE SURVEY FORMS AND PCSO CAD REPORTS – OWNER HAS 18 NOISE COMPLAINTS BETWEEN NOVEMBER 2022 – JULY 2023



AUGUST 2023

- **NO CONDITIONAL USE PERMIT ISSUED**
- **5 DAYS A WEEK - 7 DIFFERENT MUSICIANS BRING IN THEIR OWN AMPLIFIERS, SPEAKERS, AND EQUIPMENT – IT WOULD ONLY GET WORSE WITH 7 DAYS A WEEK**
- **NO SOP FOR LIVE MUSIC – SPEAKERS, AMPLIFIERS, PLACEMENT, VOLUME, DIRECTION, DURATION, AND NOISE ABATEMENT ELEMENTS**
- **15 SPEAKERS AND AMPLIFIERS FACE VDM & PAG RESIDENTS**



1220' – 164 South Tessier (Line Continues to South Tessier)

81
Decibels

VDM – 280 FEET EAST
PAG - 125 FEET NORTH

125' – 2101 PAG Way

218' – 2100 PAG Way

285' – 170 21st Ave

PASS-A-GRILLE

464' – 2032 West Vina Del Mar

60
Decibels

538' – 1805 PAG Way

RED WHITE & BOOZE





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MIKE TWITTY, MAI, CFA
PINELLAS COUNTY PROPERTY APPRAISER

Real Property

Tangible Personal Property

Quick Search

Map Search

Advanced Search

• Address

• Owner

• Parcel ID

• Sub/Condo



My Location

Search by Address (Street # and/or Name - e.g. 315 Court St or Court St)

Search Q

33 - VINA DEL MAR PROPERTIES

- Purchased Between 1982 – 2021
- Total Purchase Price - \$20.6 Million
- Total Taxable Value - \$20 Million

10 – PASS-A-GRILLE PROPERTIES

- Purchased Between 1978 – 2021
- Total Purchase Price - \$26.6 Million
- Total Taxable Value – \$28.7 Million

Total Purchase Price

\$47.2 Million

Total Taxable Value

\$48.7 Million

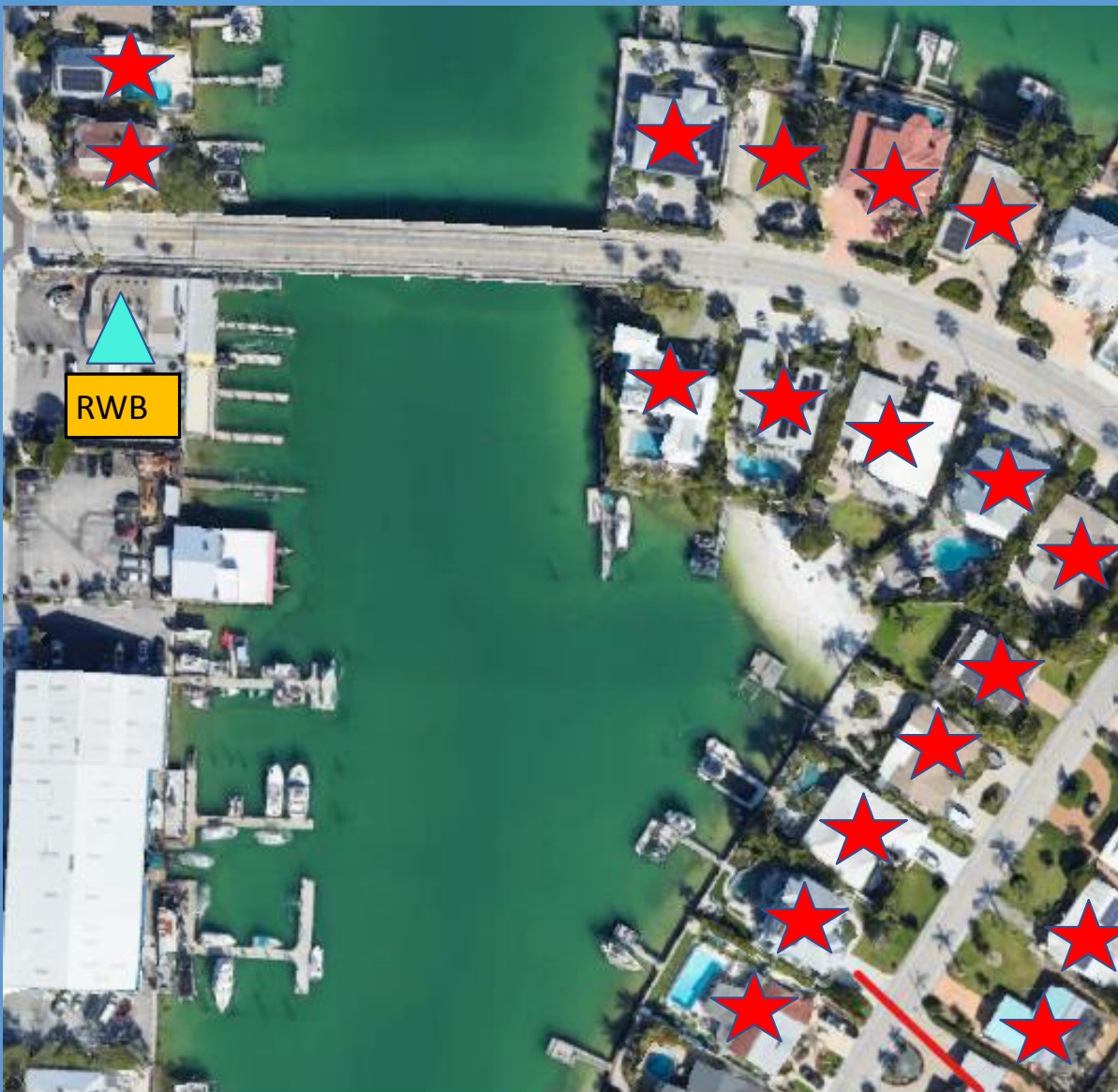
14 - RWB PROPERTIES REGISTERED UNDER SEVEN DIFFERENT STATE OF FLORIDA CORPORATION NAMES

- Purchased Between 1999 – 2022
- Total Purchase Price – \$16.5 Million
- Total Taxable Value - \$9.1 Million

VDM AND PAG RESIDENTS DIRECTLY IMPACTED BY THE ANNOYING, LOUD AND RAUCOUS MUSIC BEING PLAYED BY RWB PAY OVER FIVE TIMES THE AMOUNT OF PROPERTY TAXES

HOW CAN THE CITY HELP US HELP RWB TO BE A GOOD NEIGHBOR

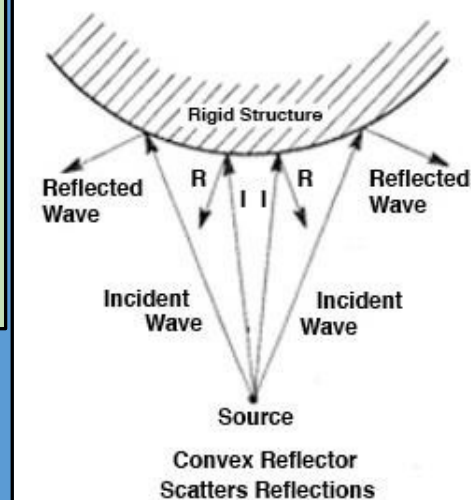
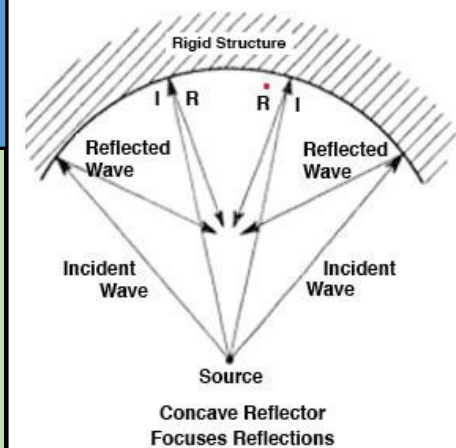
- **VDM & PAG RESIDENTS HAVE SUFFERED FOR 1 ½ YEARS WITH RWB NOT BEING A GOOD NEIGHBOR AND WE APPROVE ALL OF THE CITY RECOMMENDATIONS IN CUP 23034 STAFF REPORT – WE HOPE YOU APPROVE IT AS WELL**
- **STAFF ADDRESSED THE 70 DECIBEL LIMIT FROM OUTDOOR SPEAKER INSTALLED ON THE PROPERTY AND 55 DECIBEL LIMIT AT VDM & PAG PROPERTIES - RECOMMENDED AND LIVE MUSIC AFTER 10PM ON WEDNESDAY - SUNDAY**
- **STAFF ADDRESSED REQUIRING THE APPROVAL OF EQUIPMENT PLACEMENT SO THAT IT IS POSITIONED AWAY FROM WATER AND AWAY FROM VDM & PAG RESIDENTIAL AREAS**
- **STAFF ADDRESSED VALID CONCERNS FOR THE POTENTIAL OF PROLONGED RAUCOUS NOISE RESULTING IN NUISANCES AND INCOMPATIBILITIES WITH SURROUNDING LAND USES THAT WOULD DEPRIVE RESIDENTS OF THEIR RIGHT TO PEACEFULLY AND QUIETLY ENJOY THEIR PROPERTIES**
- **STAFF ADDRESSED UNAMPLIFIED ACOUSTIC STRING INSTRUMENTS IN OUTDOOR AREAS EXCLUDING 12PM AND 3PM EACH SATURDAY AND SUNDAY - NO PERCUSSION OR BASS INSTRUMENTS ALLOWED**
- **STAFF ADDRESSED ONLY ALLOWING AMPLIFIED LIVE MUSIC THROUGH APPROVED AND PERMANENTLY INSTALLED EQUIPMENT WITH GOVERNING HARDWARE OR SOFTWARE TO ENSURE THAT DECIBEL LEVELS ARE ADHERED TO – SOUND LIMIT LOCK BOX**
- **STAFF ADDRESSED ANY VIOLATION OF THESE CONDITIONS WILL ALLOW THE CITY COMMISSION TO RESCIND OR MODIFY THE CUP**



CONCAVE

**WHY IS RED
WHITE &
BOOZE NOT
BEING A
GOOD
NEIGHBOR?
IT COMES
DOWN TO
SCIENCE!!!**

CONVEX

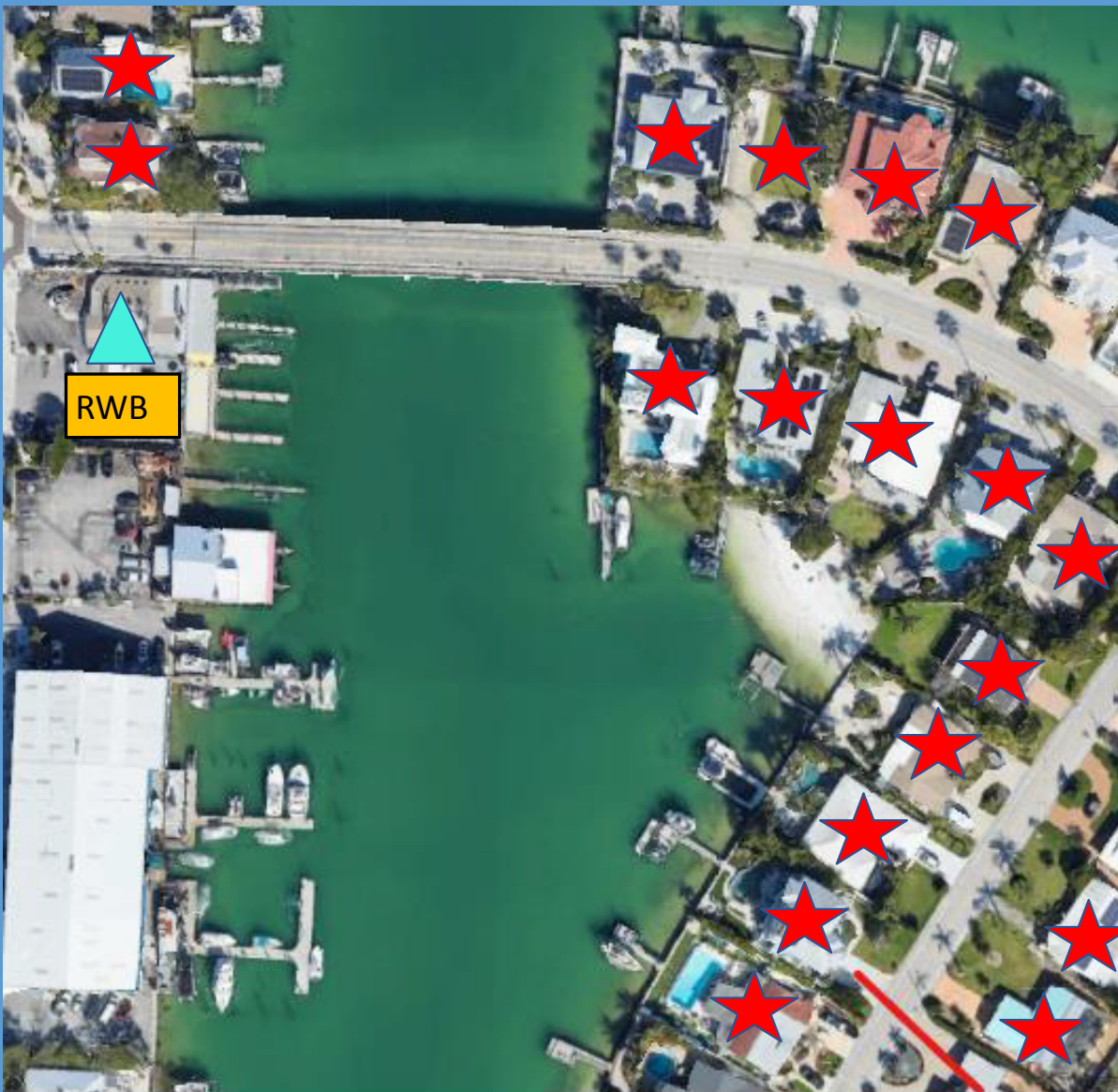


Information Provided in Staff Report for RWB Recommendation for Conditional Use Permit

ACCORDING TO THE INVERSE SQUARE LAW :

THE INTENSITY OF SOUND DISSIPATES BY SIX (6) DECIBELS FOR EACH DOUBLING OF DISTANCE FROM THE SOUND SOURCE.

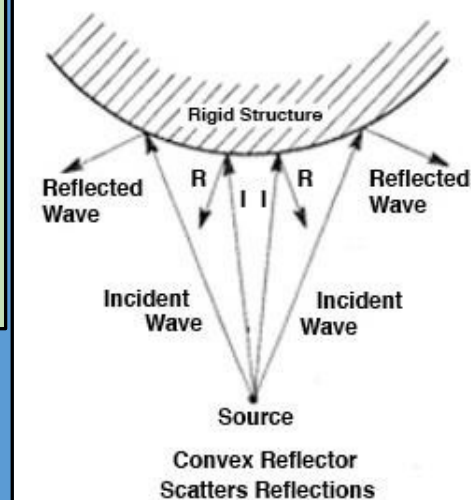
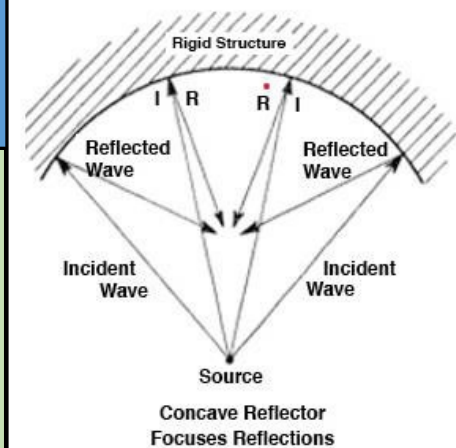
DECIBELS	70	64	58	52	46	40	34
FEET	10	20	40	80	160	320	640



CONCAVE

**WHY IS RED
WHITE &
BOOZE NOT
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CONVEX



Information Provided in Staff Report for RWB Recommendation for Conditional Use Permit

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THE INTENSITY OF SOUND DISSIPATES BY SIX (6) DECIBELS FOR EACH DOUBLING OF DISTANCE FROM THE SOUND SOURCE.

DECIBELS	70	64	58	52	46	40	34
FEET	10	20	40	80	160	320	640

NOISE SURVEY FORM

Date: 5/27/23
Location: 2007 Pass-A-Grille Way
Project: Music at Red, White and Booze

Equipment: Meter: Quest 3M Sound Level Serial #: BBM0100006

Calibrator: QC 10 Serial #: OIG120047

Performed by: P. Jumar Assistant: _____

	Start	Finish
Calibration:	<u>114.0</u>	<u>114.0</u>
Time of Day:	<u>5:50 PM</u>	<u>6:07 PM</u>
Sky:	<u>Clear</u>	<u>Clear</u>
Wind:	<u>Slight</u>	<u>Slight</u>
Noise Source:	<u>Musician at RWR</u>	

Noise Source dB Level: 81.2
Ambient Noise dB Level: 66.0
Difference to Adjust: 15.2
Adjusted Noise Source dB Level: 81.2

<u>Difference between</u>	<u>Subtract from</u>
Source & Ambient	Source dB Level
0 to 3dB.....	Invalid Test
4 to 5dB.....	2dB
6 to 9dB.....	1dB
10dB or more.....	0dB

Remarks: _____

Signature:  Title: C.E.M

NOISE SURVEY FORM

Date: 5/27/23
Location: 2007 Pass-A-Grille Way
Project: Music at Red, White and Booze

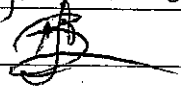
Equipment: Meter: Quest 3M Sound Level Serial #: BBM0100006
Calibrator: QC 10 Serial #: OIG120047

Performed by: P. Dewar Assistant: _____

	Start	Finish
Calibration:	<u>114.0</u>	<u>114.0</u>
Time of Day:	<u>6:17pm</u>	<u>6:25pm</u>
Sky:	<u>Clear</u>	<u>Clear</u>
Wind:	<u>Slight</u>	<u>Slight</u>
Noise Source:	_____	_____

Noise Source dB Level:	<u>67.2</u>
Ambient Noise dB Level:	<u>62.6</u>
Difference to Adjust:	<u>4.6</u>
Adjusted Noise Source dB Level:	<u>65.2</u>

<u>Difference between</u>	<u>Subtract from</u>
Source & Ambient	Source dB Level
0 to 3dB.....	Invalid Test
4 to 5dB.....	2dB
6 to 9dB	1dB
10dB or more.....	0dB

Remarks: Spoke to Charles and reading is being taken at a level that he has agreed to set the volume
Signature:  Title: C. E. N.

NOISE SURVEY FORM

Date: 5/27/23
Location: 2007 Pass-a-Gsille Way (RWB)
Project: _____

Equipment: Meter: Quest 3M Sound Level Serial #: BBM0100006

Calibrator: QC 10 Serial #: OIG120047

Performed by: Dep. T. Stanton

Assistant: Sgt. A. Clark

	Start	Finish
Calibration:	<u>114.0 DB</u>	<u>114.0 DB</u>
Time of Day:	<u>19:09</u>	<u>20:04</u>
Sky:	<u>Clear</u>	<u>Clear</u>
Wind:	<u>N/A</u>	<u>N/A</u>
Noise Source:	<u>Amplified Music from RWB</u>	

Noise Source dB Level: 58.9 DB Leq
Ambient Noise dB Level: _____
Difference to Adjust: _____
Adjusted Noise Source dB Level: _____

<u>Difference between</u>	<u>Subtract from</u>
Source & Ambient	Source dB Level
0 to 3dB.....	Invalid Test
4 to 5dB.....	2dB
6 to 9dB.....	1dB
10dB or more.....	0dB

Remarks: _____

Signature: [Signature] Title: Deputy

NOISE SURVEY FORM

Date: 6-4-23

Location: 2023 W Vima Del Mar

Project: Red, White & Booz

Equipment: Meter: Quest 3M Sound Level

Serial #: BBM0100006

Calibrator: QC 10

Serial #: OIG120047

Performed by: S. River

Assistant: _____

①

	Start	Finish
Calibration:	<u>114.0</u>	<u>114.2</u>
Time of Day:	<u>3:33 pm</u>	<u>4:45</u>
Sky:	<u>Partly cloudy</u>	<u>Partly cloudy</u>
Wind:	<u>moderate</u>	<u>Moderate</u>
Noise Source:	<u>Music from dock</u>	

Noise Source dB Level:	<u>60.5</u>
Ambient Noise dB Level:	<u>55.5</u>
Difference to Adjust:	<u>5.0</u>
Adjusted Noise Source dB Level:	<u>58.5</u>

Difference between

Subtract from

Source & Ambient

Source dB Level

0 to 3dB..... Invalid Test

4 to 5dB..... 2dB

6 to 9dB 1dB

10dB or more..... 0dB

Remarks: Music playin Low.

Signature: ASR

Title: Code officer

NOISE SURVEY FORM

Date: 7/1/23

Location: 2032 W. Vine Del Mar

Project: Music at RNB

Equipment: Meter: Quest 3M Sound Level

Serial #: BBM0100006

Calibrator: QC 10

Serial #: QIG120047

Performed by: P. Dewar

Assistant: J. Leiford

	Start	Finish
Calibration:	<u>114.0</u>	<u>114.0</u>
Time of Day:	<u>7:05 PM</u>	<u>7:26 PM</u>
Sky:	<u>Clear</u>	<u>Clear</u>
Wind:	<u>Slight</u>	<u>Slight</u>
Noise Source:	<u>Musician at RNB</u>	

Noise Source dB Level: 61.5

Ambient Noise dB Level: 59.8

Difference to Adjust: 1.7

Adjusted Noise Source dB Level: Invalid

<u>Difference between</u>	<u>Subtract from</u>
Source & Ambient	Source dB Level
0 to 3dB.....	Invalid Test
4 to 5dB.....	2dB
6 to 9dB.....	1dB
10dB or more.....	0dB

Remarks: Test invalid since noise source and ambient are within 3dB of each other

Signature: [Signature] Title: C.E.M.

NOISE SURVEY FORM

Date: 7/1/23

Location: 21st Ave bridge

Project: Music at RWB

Equipment: Meter: Quest 3M Sound Level

Serial #: BEM0100006

Calibrator: QC 10

Serial #: QIG120047

Performed by: P. Dewar

Assistant: J. Gelford

	Start	Finish
Calibration:	<u>114.0</u>	<u>114.0</u>
Time of Day:	<u>7:36 PM</u>	<u>8:06 PM</u>
Sky:	<u>Clear</u>	<u>Clear</u>
Wind:	<u>Slight</u>	<u>Slight</u>
Noise Source:	<u>Music at RWB</u>	

Noise Source dB Level:	<u>68.0</u>
Ambient Noise dB Level:	<u>64.4</u>
Difference to Adjust:	<u>3.6</u>
Adjusted Noise Source dB Level:	<u>66.0</u>

Difference between

Subtract from

Source & Ambient

Source dB Level

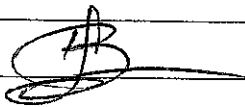
0 to 3dB..... Invalid Test

4 to 5dB..... 2dB

6 to 9dB 1dB

10dB or more..... 0dB

Remarks: _____

Signature:  Title: C.E.M.

CITY COMMISSION MEETING CITY OF ST. PETE BEACH

Agenda Report

Action Request:

Consider adoption of additional clearly audible, nuisance based standard in the noise ordinance.

Strategic Objective:

To apply a common sense, objective and easy to apply additional third standard for noise violations.

Date:

January 28, 2025

Prepared By:

Becky Vose, City Attorney's Office

Summary of Issue:

The City currently has two standards for noise violations that have not been effective in controlling excessive noise in the City.

This ordinance provides a legally defensible and easy to apply additional third standard that is a nuisance-based clearly audible standard to curb excessive noise in the city.

Funding:

No additional funding should be necessary for this amendment.

Attachments:

Copy of proposed Ordinance.

Abstract

Florida is changing and growing and as change takes place, law enforcement will be confronted with many issues. Noise ordinance enforcement is an area that traditionally law enforcement has not looked at as a high priority. Quality of life issues are one area that law enforcement may be given the responsibility of enforcing. Something initially viewed as a minor complaint can have serious effects on the residents of a community. Most communities in Florida have a noise ordinance in one form or another. Enforcement of noise ordinances is a science that administrators should look at from a training prospective as well as realistic prosecution. This paper will explore the different types of ordinances as well as the proper equipment to be used.

Introduction

As Florida moves into the new millennium, many problems will continue to emerge. Communities are growing as never before, fueled by the large tourism industry. Our woodlands and wetlands are giving way to new developments. New entertainment theme parks open on a regular basis. Beautiful beaches all over Florida have seen dramatic changes. The sand dunes and sea oats are giving way to homes and condominiums. As these changes take place, new problems arise. Bars, restaurants and hotels line the roadways. As these areas expand, they move closer to our residential neighborhoods, exposing sounds of loud music, traffic and machinery to adjacent homes. If gone unchecked by the local governments, the quality of life of the residents will decline.

When an agency begins receiving noise complaints, often from a single complainant, it is very easy to classify that individual as overly sensitive, or even a chronic complainer. But the problem goes much deeper than that. We must look at several issues to fully understand the magnitude of the problem of noise. We must first understand the difference between sound, and noise.

There are physical and psychological effects of noise on individuals. Sleep deprivation can have devastating effects on people. People have been driven to drastic measures as a result of stress brought on by a noise complaint. Do the rights of individuals to not have their lives interfered with by noise, take precedence over other individuals rights to conduct business for profit?

The goal of this research paper is to bring about a better understanding to law enforcement the need to properly train officers who are given the responsibility of enforcing noise ordinances in Florida. Literature reviews are used to provide a basic understanding of noise, and its effects on communities. Previously documented research will assist in exposing the detrimental effects of noise from a psychological, as well as a physical stand point. Studies of noise conducted by various sources will be used to demonstrate the need for proper enforcement. The director of Rutgers University, College of Environmental Science was very helpful with technical assistance.

Research Problem

Noise ordinance enforcement in most communities is not a high priority. Most communities in Florida have a noise ordinance or code in one form or another. However, enforcement is something we do not practice on a regular basis unless a complaint is received. Once the complaints begin, we are charged with a task of enforcement. In many agencies the officers may not be properly prepared to take an enforcement action that will result in a strong case for the prosecution.

Currently there are many very different noise ordinances throughout the state. These ordinances or codes have broad differences. Some are based simply on a nuisance statement, while others are performance based. Performance based ordinances have specific sound level guidelines which after taking a sound level reading, clearly state what is, and what is not a violation.

When a local government chooses to use a performance-based type ordinance, the personnel assigned to the enforcement of the ordinance have very little, or no training in the use of sophisticated measurement equipment. In these situations the measurement equipment can vary greatly. There are sound level measurement devices that are of a high quality, affordable, and with some instruction on the operation, are relatively easy to use. The instruments used for measuring sound vary a great deal in cost, as well as quality. This research will examine instruments that are available, and which ones have proven to be dependable and accurate. Many ordinances are written in a manner that a very specific type of decibel meter would be required for proper enforcement. Yet, these same jurisdictions do not possess the equipment required to enforce their own ordinances. In many cases they find that equipment this specific, is just not affordable. In other cases a city will purchase a decibel meter which is so difficult to use, and they later find it to be money wasted.

As Florida continues to grow, so will litigation of cases involving noise ordinance enforcement. It is for this reason that law enforcement administrators must ensure that enforcement is taken seriously. This research will attempt to answer the following questions concerning noise ordinance enforcement.

- 1) At what point does sound become noise?
- 2) Is there a need for proper noise ordinance enforcement?
- 3) Do current noise ordinances have a realistic impact on our communities?
- 4) Do agencies provide proper training to personnel assigned to noise ordinance enforcement?
- 5) Would mandated guidelines for noise ordinance enforcement be beneficial to communities?

Background

With the addition of loudspeakers, music more readily crosses from one property line to another. This can interfere with peace and tranquility of a community. The United States Supreme Court recognized the rights of residents to maintain their privacy. As early as 1949 it recognized local government's duty to regulate, and enforce laws protecting individuals from the invasion of amplified music. The court stated, "in his home or on the street he is practically helpless to escape this interference with his privacy by loud speakers except through the protection of the municipality." (Kovac v. Cooper, 336 U.S. 77, 87 (1949))

The Florida Constitution, states that "it shall be the policy of the state to conserve and protect its natural resources and scenic beauty. Adequate provisions shall be made

by law for the abatement of air and water pollution and excessive and unnecessary noise.”(Florida Constitution, Article II, Section 7)

Sound Wave Measurement

Sound waves are a series of compressions and refractions within a medium. There are two components of sound waves, intensity and frequency. Intensity is determined by the amount of energy in a sound wave. This contributes to the loudness as perceived by the human ear. The intensity, or sound pressure is reported and measured in decibels (db.) (Zwerling, 1996). The decibel scale is similar to the Richter scale in the respect that they are both logarithmic. (When there is an increase of three decibels of sound pressure, humans perceive a 10-decibel increase as a doubling of the loudness.) Frequency is measured by how fast the sound waves are moving. This determines the pitch of the sound. The term Hertz (Hz) is used to report the measurement of frequency. Frequency is measured in cycles per second. (Zwerling, 1996)

Most ordinances have it written into them that require measurement with a decibel meter be taken on the A-scale. The reason for this is that the A-scale is designed to mimic that of human hearing. When a measurement is taken with a decibel meter on the A-scale, the result is a single number for measurement that would be closest to the way the human ear would perceive that particular source. A single number of measurements are then reported, such as 65db.

There is a recent interest in areas of Florida to allow enforcement officers to take sound measurements with meters using the “C” scale. The “C” scale weighting system allows the sound meter to pick up low frequencies. These are the intrusive sub-woofer type of bass sounds that can penetrate structures and result in physical sensation. This type of base is not readable using the “A” scale. (Zwerling, 2000)Most quality sound meters are already equipped with “C” scale weighting, and can be changed from “A” to “C” with a simple switch. When properly applied the “C” scale is a valuable tool in sound enforcement.

Methods

Mail surveys were conducted with State Attorney’s throughout the state, to determine their opinions of what is proper to present a clear and convincing case in the courts. The survey consisted of six questions. (Appendix A) It was sent to all of the State Attorney’s Offices representing each judicial circuit.

The paper also examines the two most common types of noise enforcement codes. The first being the nuisance codes. The second are performance codes. Nuisance codes have in some cases been found to be unconstitutional. This is due to their lack of specific wording, and not clearly stating what in fact is a violation. The performance based codes are codes which have more often been upheld by the courts. They are based on a very clear and specific statement of what is a violation. Performance codes contain very specific guidelines for enforcement. They usually also contain a table which will state the allowable decibel levels. (Appendix B)

The proper preparation and presentation of a case is a major basis of this research paper. There are many factors to consider when investigating a noise complaint. One of the questions asked most often, is how do you determine what noise is coming from the source of the complaint, and what noise is coming from an additional outside source, such as traffic. These questions will be answered, in a very simple and clear manner. Much of the sound measurement instruction was found in previous research conducted

by Department of Environmental Sciences at Rutgers University as well as literature reviews.

Results

Survey Results from State Attorney's

The response to the mail survey was positive with a 68% response to the survey. The responses will be broken down by question.

- 1) What points do you look for to prosecute a noise violation? Note: Respondents to question one in some cases provided multiple answers.
 - a. 54% agreed that previous warnings, or past problems were important for prosecution.
 - b. 38% stated the level of noise was important. (db level)
 - c. 38% stated that the elements of the ordinance must be met.
 - d. 38% required the number of victims / witnesses present.
 - e. 23% stated that the area of the complaint was important, residential or business.
 - f. 15% said that the time of day of the violation was important.
- 2) Do you believe that it is better from a prosecution stand point to enforce an ordinance or code that sets forth specific decibel levels or one that is nuisance based?
 - a. 62% preferred an ordinance that is performance based.
 - b. 31% preferred a nuisance based ordinance.
 - c. 8% had no preference.
- 3) Have you found officer training to be adequate in cases that you have prosecuted?
 - a. 38% had no experience or were not aware of any cases for prosecution.
 - b. 30% said that officer training was adequate.
 - c. 15% said that officer training was not adequate for prosecution.
 - d. 8% believe that it depends on the type of case.
- 4) Are noise measurement devices used by officers noted by the court to be adequate?
 - a. 54% are not aware of any noise measurement device owned by their city or county.
 - b. 31% said that law enforcement does not use noise measurement devices.
 - c. 15% have been found to be adequate.
- 5) Do Assistant State Attorney's receive any training to assist them in understanding sound measurement?
 - a. 100% stated that they received no training in sound measurement.

6) Would any officer training assist you in prosecuting a noise violation case?

- a. 69% stated documented training would be beneficial for prosecution.
- b. 31% responded that training would be of no help.

Physical Effects of Noise

Noise can affect people in different ways. It has been found that sleep interference occurs at an average night time sound level of 35db. It has also been determined that younger people are found to be less sensitive to sleep interruption by about 10db. (Suter, 1991) When measuring sound, and the effect of sound passing through barriers or walls, sound reduces by approximately 15db. Meaning that if sound were to be measured at 50db outside of a home, the db reading on the inside of the home would be approximately 35db. Thus allowing uninterrupted sleep. Unregulated noise has been proven to have serious adverse effects on people far beyond simple annoyance. Exposure to loud noise has resulted in uncontrollable stress which can result in mood swings as well as hormonal and nervous system changes in otherwise healthy subjects. (E.P.A. 1974) The stress, tension, and fatigue associated with long term exposure to noise has destroyed marriages, caused others to loose their jobs, and forced other to sell their homes at considerable losses. (Zwerling, 1996)

The Ordinance or Code

Very often it is found that police rely on nuisance ordinances for enforcement of a noise complaint. The reason is that in many cases the field enforcement of a performance based ordinance does not meet the need of the field officer. The equipment it not readily available or the officer does not have proper training to operate the equipment. This lack of training may also cause the officer to be uncomfortable defending the case in court.

There is wording that can be used in a nuisance based code that has been upheld by the courts. A standard of "plainly audible" has been held to be neither broad or vague. (State v Ewing, 914 P. 2d 549, Haw (1996)) This wording is clear and easily understood by anyone. The subjectivity has been removed. The following standard can be used in an ordinance to address a sound system: "plainly audible" means any sound that can be detected by a person using his or her unaided hearing faculties. When considering a workable ordinance for a residential or commercial area, simply apply the "plainly audible" wording using specific times and distances.

In many instances performance based codes or ordinances are written without input from experts in the field of noise or acoustics. Law enforcement is also not solicited for input. With a desire for continuity, ordinances are often copies from another jurisdiction. The result in many cases is the perpetuation of a vague or ineffective ordinance.

Several ordinances in Florida currently are based upon statistical averaging. (e.g., L10- the sound level which is exceeded ten percent of the time.) This type of ordinance requires very sophisticated equipment which is very expensive. There are still other ordinances which do not allow noise to exceed a specific level for a given period of time. An example of this would be an ordinance which states for example, the noise level shall not exceed X db, for a three minute commutative period in any sixty minute period. When an officer wants to enforce an ordinance of this nature it very difficult to prove that the source was above the limit for a specific period of time without measurement

equipment with a recorder built in. This type of equipment is also expensive and requires a full sixty minutes of sound measurement.

There are alternatives which are effective. An ordinance which states a specific db level that should not be exceeded when measuring a single incident that exhibits the everyday operation of the location in question. (Zwerling, 1996) Wording an ordinance in this manner would include noises such as a truck loading or unloading, or an annoying piece of machinery. This type noise may be relatively short in duration but they are included in an ordinance worded in this manner. (Zwerling, 1996)

There are several other considerations to look at when deriving a workable and enforceable noise ordinance. Agencies should develop a noise violation report form. This form needs to include relevant information such as date, time, calibration times, location, and person taking the reading. Another piece of helpful information is a diagram of the scene. This will give the prosecutor a much better understanding of the location when presenting the case to the courts. Weather conditions should always be stated in the report. Wind and temperature can all have effects on the readings the sound measurement equipment provide. Sound measurements should not be taken when precipitation is falling or on the ground, because the moisture can damage the sound meter. (Cowan, 1994) The report form should also include the type, and model of the equipment used for the sound measurement. (Appendix C)

Sound Measurement Equipment

Sound measurement equipment is manufactured in accordance with the American National Standards Institute (ANSI). (Cowan, 1994) In a case where a private party had continuously loud stereo, chances are they would not challenge a db meter purchased at an electronic outlet. A case made against a bar, with several prior complaints will probably challenge the sound measurement device. So it is important to use equipment that meets the industry standards. A good quality measurement device can be purchased with a calibrating device for about \$1000.00. This type of a device is relatively easy to operate with some instruction, and is reliable enough to withstand a challenge in the courts.

Typical sound level calibrators are small and can be handled with relative ease. Most come with an adapter to fit the meter to be calibrated. With most sound meters, the calibrator fits over the end of the meter. Then the calibrator is turned on. The sound meter must read within two db of the calibrators sound pressure given. Meaning if the calibrator is displayed at 114db, the meter must be within two db to continue the measurements. If the meter is out of the two db range, then the meter may be manually adjusted to come into compliance. All sound meters should be calibrated by the factory at least once per year.

Taking the Sound Measurement

The first step to taking a sound measurement is to determine the actual source of the noise. Walking around the source of the noise will be helpful when completing the diagram portion of the sound measurement report form. It will also provide you with better testimony should the case go to court. The report form should be filled out completely. The noise source should be described, and if the measurement taken represents a normal cycle of operation for the facility. (Zwerling, 1999) The instrument used for the sound measurement should be properly calibrated, and the results recorded. Noting the results of the field calibration is absolutely required for a valid sound measurement report form. (Zwerling, 1999)

There are several ways to measure residual sound levels in a residential neighborhood. The investigator can walk in the opposite direction of the source, away from the residual noise, or measurement may taken in a similar neighborhood with away from the source of the complaint. The person taking the measurement may use a barrier to block the source of outside noise. (Zwerling, 1999)

When taking the sound level reading, it is best to take a reading with the source off. This will give a reading of the background sound level. A reading of the ambient sound level should be taken with the source of the complaint on as well. To determine the difference between the ambient and background sound levels the table below can be used. (Cowan, 1994)

Table 1

Correction for Background Sound Levels.

Difference between Ambient and Background Sound Levels	Corrections Factor to be subtracted from Ambient Level for Source Level
3	3
4, 6	2
6- 9	1
10 or more	0

Measured in dbA

If the ambient noise level is less than 3 dbA higher than the background sound level, than the source level cannot be determined. In this case no violation can be substantiated. (Cowan, 1994)

When taking sound measurements the time of the measurement should last at least five minutes in duration. This will insure the measurements are accurate for the particular source in question.

Discussion

The subject of noise enforcement is a quality of life issue. An issue which some do not even believe to be a law enforcement issue. In some jurisdictions law enforcement is not given the responsibility of enforcement. In locations where law enforcement is charged with noise enforcement, we must go beyond the surface and examine the facts. The facts are that we have a responsibility to maintain the quality of life with the tools our communities give us. The ordinances or codes whether they are performance based or nuisance based must be enforced. If a community does not choose to restrict sound, then the ordinance should not exist.

If law enforcement administrators are charged with responsibility of enforcement of noise ordinances, then there is a responsibility that we provide the proper tools, and training to the officers expected to investigate these types of complaints. All too often officers expect officers to be able to complete a task, however difficult, without adequate training, or no training at all. The measurement of sound, is based in scientific fact. This is a science that without some training very few people understand. Yet, how many times do officers respond to a noise complaint and not have any real understanding of what they are measuring.

There are those who would argue that this is such a minor offense that it does not warrant too much of an investment in training. When a police officer becomes certified in this state to operate a traffic radar unit, the officer receives forty hours of mandatory training. Yet there is no requirement for officers who use sound measurement devices to make a case. I am not suggesting a forty hour state mandated course, however I do believe the research shows that some training should be required.

Sergeant Patrick Dooley has been with the Jacksonville Beach Police Department since 1991. He has worked in several areas to include patrol, detectives division, evidence technician, gang intelligence, field training officer and juvenile specialist. Pat is pursuing his Bachelor's degree in Criminal Justice from St. Leo University. He is also a graduate of the FBI National Academy, 228 Session.

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Appendix A

SURVEY QUESTIONS

State Attorneys

- 1) What points do you look for to prosecute a noise violation?
- 2) Do you believe that it is better from a prosecution stand point to enforce an ordinance or code that is sets forth specific decibel levels or one that is nuisance based?
- 3) Have you found officer training to be adequate in cases that you have prosecuted?
- 4) Are the noise measurement devices used by officers noted by the courts to be adequate?
- 5) Do Assistant State Attorneys receive any training to assist them in understanding sound measurement?
- 6) Would any documented officer training assist you in prosecuting a noise violation case?

Appendix B

Maximum Permissible Sound Levels

<u>Source Property</u>	<u>RECEIVING PROPERTY</u>		
	<u>RESIDENTIAL</u>	<u>COMMERCIAL</u>	
	<u>7:00am - 10:00pm</u>	<u>10:00pm - 7:00am</u>	<u>All Times</u>
Residential	55	50	65
Commercial	65	50	65
Industrial	65	50	65

Appendix C

SOUND MEASUREMENT REPORT FORM

NAME/ADDRESS OF NOISE SOURCE:

DATE _____ DAY OF WEEK _____ TIME _____ am /pm.

Investigating

Agency _____

Investigating Officer _____

Name of responsible party notified _____

Description of noise source to be
measured: _____

Description of property receiving noise _____

Description of Residual Noises, (fairly constant in
nature) _____

Description of Extraneous Noises, (intermittent in nature, and not from source) _____

DESCRIPTION OF INSTRUMENT:

SOUND LEVEL METER _____ MODEL # _____ ANSI TYPE _____

SERIAL # _____ DATE OF LAST CERTIFICATION _____

SOUND LEVEL CALIBRATOR _____ WIND SCREEN USED (YES/NO) _____

WIND METER USED (YES/ NO) _____ TIME OF CALIBRATION _____

WEATHER CONDITIONS:

PRECIPITATION _____ GROUND WET _____ TEMPERATURE: _____

WIND VELOCITY _____ TIME TAKEN _____

NEIGHBORHOOD RESIDUAL NOISE MEASUREMENT:

TIME : START / FINISH READING RANGE (dbA) TYPE RESIDUAL LOCATION OF MEASUREMENT/
COMMENTS

MEASUREMENT OF TOTAL NOISE:

TIME : START / FINISH READING RANGE (dbA) CORRECTED (SOURCE) LEVEL LOCATION / COMMENTS

Noise Measurement Taken By:

Reviewed By:

INCLUDE SITE SKETCH ON REVERSE (Include source, walk around, and exact measurement location)

**INFORMATION ON LEVELS OF
ENVIRONMENTAL NOISE
REQUISITE TO PROTECT
PUBLIC HEALTH AND WELFARE
WITH AN ADEQUATE MARGIN
OF SAFETY**

MARCH 1974

**PREPARED BY
THE U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF NOISE ABATEMENT AND CONTROL**

**This document has been approved for general
availability. It does not constitute a standard,
specification, or regulation.**

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FOREWORD

The Congress included among the requirements of the Noise Control Act of 1972 a directive that the Administrator of the Environmental Protection Agency ". . . develop and publish criteria with respect to noise . . ." and then "publish information on the levels of environmental noise the attainment and maintenance of which in defined areas under various conditions are requisite to protect the public health and welfare with an adequate margin of safety."

Not all of the scientific work that is required for basing such levels of environmental noise on precise objective factors has been completed. Some investigations are currently underway, and the need for others has been identified. These involve both special studies on various aspects of effects of noise on humans and the accumulation of additional epidemiological data. In some cases, a considerable period of time must elapse before the results will be meaningful, due to the long-term nature of the investigations involved. Nonetheless, there is information available from which extrapolations are possible and about which reasoned judgments can be made.

Given the foregoing, EPA has sought to provide information on the levels of noise requisite to protect public health and welfare with an adequate margin of safety. The information presented is based on analyses, extrapolations and evaluations of the present state of scientific knowledge. This approach is not unusual or different from that used for other environmental stressors and pollutants. As pointed out in "Air Quality Criteria" - Staff Report, Subcommittee on Air and Water Pollution, Committee on Public Works, U.S. Senate, July, 1968,

The protection of public health is required action based upon best evidence of causation available. This philosophy was appropriately expressed by Sir E. B. Hill, 1962, when he wrote: All scientific

work is incomplete - whether it be observational or experimental. All scientific work is liable to be upset or modified by advancing knowledge. That does not confer upon us freedom to lower the knowledge we already have, or to postpone the action that it appears to demand at a given time. The lessons of the past in general health and safety practices are easy to read. They are characterized by empirical decisions, by eternally persistent reappraisal of public health standards against available knowledge of causation, by consistently giving the public the benefit of the doubt, and by ever striving for improved environmental quality with the accompanying reduction in disease morbidity and mortality. The day of precise quantitative measurement of health and welfare effects has not yet arrived. Until such measurement is possible, action must be based upon limited knowledge, guided by the principal of the enhancement of the quality of human life. Such action is based on a philosophy of preventive medicine.

The foregoing represents the approach taken by EPA in the preparation of this present document on noise. As the fund of knowledge is expanded, improved and refined, revisions of this document will occur.

The incorporation of a margin of safety in the identification of non-hazardous levels is not new. In most cases, a statistical determination is made of the lowest level at which harmful effects could occur, and then an additional correction is applied as a margin of safety. In the case of noise, the margin of safety has been developed through the application of a conservative approach at each stage of the data analysis. The cumulation of these results thus provides for the adequate margin of safety.

It should be born in mind that this Document is published to present information required by the Noise Control Act, Section 5(a)(2), and that its contents do not constitute Agency regulations or standards. Its statistical generalizations should not be applied to a particular individual. Moreover, States and localities will approach this information according to their individual needs and situations.

I. INTRODUCTION

The Noise Control Act of 1972 established by statutory mandate a national policy "to promote an environment for all Americans free from noise that jeopardizes their public health and welfare". The Act provides for a division of powers between the Federal and state and local governments, in which the primary Federal responsibility is for noise source emission control, with the states and other political subdivisions retaining rights and authorities for primary responsibility to control the use of noise sources and the levels of noise to be permitted in their environment.

In order to provide adequately for the Federal emission control requirement and to insure Federal assistance and guidance to the state and localities, the Congress has established two separate but related requirements with regard to scientific information about health and welfare effects of noise. First, the Environmental Protection Agency was called upon to publish descriptive data on the effect of noise which might be expected from various levels and exposure situations. Such "criteria" statements are typical of other environmental regulatory schemes. Secondly, the Agency is required to publish "information" as to the levels of noise "requisite to protect the public health and welfare with an adequate margin of safety".

A. Summary

The first requirement was completed in July, 1973, when the document "Public Health and Welfare Criteria for Noise" was published. The present document represents the second step. Much of the scientific material on which this document is based was drawn from the earlier "Criteria Document", while additional material was gathered from scientific publications and other

sources, both from the U.S. and abroad. In addition, two review meetings were held which were attended by representatives of the Federal agencies as well as distinguished members of the professional community and representatives from industrial and environmental associations. The reviewers' suggestions, both oral and written, have received thoughtful attention, and their comments incorporated to the extent feasible and appropriate.

After a great deal of analysis and deliberation, levels were identified to protect public health and welfare for a large number of situations. These levels are subject to the definitions and qualifications contained in the Foreword. They are summarized in Table 1 according to the public health and welfare effect to be protected against, the requisite sound level, and the areas which are appropriate for such protection.

In order to identify these levels, a number of considerations and hypotheses were necessary, which are listed below with reference to the appropriate appendices where they are discussed in detail.

1. In order to describe the effects of environmental noise in a simple, uniform and appropriate way, the best descriptors are the long-term equivalent A-weighted sound level (L_{eq}) and a variation with a nighttime weighting, the day-night sound level (L_{dn}) (see Appendix A).
2. To protect against hearing impairment (see Appendix C):
 - a. The human ear, when damaged by noise, is typically affected first at the 4000 Hz frequency.
 - b. Changes in hearing level of less than 5 dB are generally not considered noticeable or significant.

- c. One cannot be damaged by sounds considered normally audible, which one cannot hear.
 - d. Protecting the population up to a critical percentile (ranked according to decreasing ability to hear) will also protect those above that percentile, (in view of consideration 4c above) thereby protecting virtually the entire population.
3. To correct for intermittency and duration in identifying the appropriate level to protect against hearing loss (also, see Appendix C):
- a. The Equal Energy Hypothesis
 - b. The TTS Hypothesis
4. To identify levels requisite to protect against activity interference (see Appendix D):
- a. Annoyance due to noise, as measured by community surveys, is the consequence of activity interference.
 - b. Of the various kinds of activity interference, speech interference is the one that is most readily quantifiable.

Table 1

SUMMARY OF NOISE LEVELS IDENTIFIED AS REQUISITE TO PROTECT PUBLIC
HEALTH AND WELFARE WITH AN ADEQUATE MARGIN OF SAFETY
(see Table 4 for detailed description)

Effect	Level	Area
Hearing Loss	$L_{eq(24)} \leq 70 \text{ dB}$	All areas
Outdoor activity interference and annoyance	$L_{dn} \leq 55 \text{ dB}$	Outdoors in residential areas and farms and other outdoor areas where people spend widely varying amounts of time and other places in which quiet is a basis for use.
	$L_{eq(24)} \leq 55 \text{ dB}$	Outdoor areas where people spend limited amounts of time, such as school yards, playgrounds, etc.
Indoor activity interference and annoyance	$L_{dn} \leq 45 \text{ dB}$	Indoor residential areas
	$L_{eq(24)} \leq 45 \text{ dB}$	Other indoor areas with human activities such as schools, etc.

Explanation of Table 1 :

1. Detailed discussions of the terms L_{dn} , $L_{eq(8)}$ and $L_{eq(24)}$ appear later in the document. Briefly, $L_{eq(8)}$ represents the sound energy averaged over an 8-hour period while $L_{eq(24)}$ energy averages over a 24-hour period. L_{dn} represents the L_{eq} with a 10 dB nighttime weighting.
2. The hearing loss level identified here represents annual averages of the daily level over a period of forty years. (These are energy averages, not to be confused with arithmetic averages.)

3. Relationship of an $L_{eq}(24)$ of 70 dB to higher exposure levels.

EPA has determined that for purposes of hearing conservation alone, a level which is protective of that segment of the population at or below the 96th percentile will protect virtually the entire population. This level has been calculated to be an L_{eq} of 70 dB over a 24-hour day.

Given this quantity, it is possible to calculate levels which, when averaged over given durations shorter than 24 hours, result in equivalent amounts of energy. For example, the energy contained in an 8-hour exposure to 75 dB is equivalent to the energy contained in a 24-hour exposure to 70 dB. For practical purposes, the former exposure is only equivalent to the latter when the average level of the remaining 16 hours per day is negligible (i.e., no more than about 60 dB* for this case).

An $L_{eq}(8)$ of 75 is considered an appropriate level for this particular duration because 8 hours is the typical daily work period. In addition, the 24-hour exposure level was derived from data on 8-hour daily exposures over a 40-year working life. In planning community noise abatement activities, local governments should bear in mind the special needs of those residents who experience levels higher than $L_{eq}(8)$ at 70 on their jobs.

These levels are not to be construed as standards as they do not take into account cost or feasibility. Nor should they be thought of as discrete numbers, since they are described in terms of energy equivalents. As specified in this document, it is EPA's judgment that the maintenance of levels

* This is not to imply that 60 dB is a negligible exposure level in terms of health and welfare considerations, but rather that levels of 60 dB make a negligible contribution to the energy average of $L_{eq} = 70$ dB when an 8-hour exposure of 75 dB is included.

of environmental noise at or below those specified above, are requisite to protect the public from adverse health and welfare effects. Thus, as an individual moves from a relatively quiet home, through the transportation cycle, to a somewhat noisier occupational situation, and then back home again, his hearing will not be impaired if the daily equivalent of sound energy in his environment is no more than 70 decibels. Likewise, undue interference with activity and annoyance will not occur if outdoor levels are maintained at an energy equivalent of 55 dB and indoor levels at 45 dB. However, it is always assumed throughout that environmental levels will fluctuate even though the identified energy equivalent is not exceeded. Likewise, human exposure to noise will vary during the day, even though the daily "dose" may correspond well to the identified levels.

Before progressing further, it would be helpful to differentiate between the terms "levels", "exposure" and "dose". As used in this document, the word "level" refers to the magnitude of sound in its physical dimension, whether or not there are humans present to hear it. "Exposure" is used to mean those sound levels which are transmitted to the human ear, and "dose" is the summed exposure over a period of time.

B. Legislative History

Pursuant to Section 5(a)(1), EPA developed and published on July 27, 1973, criteria reflecting:

. . . the scientific knowledge most useful in indicating the kind and extent of all identifiable effects on the public health or welfare which may be expected from differing quantities and qualities of noise.

Under Section 5(a)(1), EPA was required to provide scientific data that, in its judgment, was most appropriate to characterize noise effects.

The present "levels information" document is required by Section 5(a)(2), which calls for EPA to publish,

. . . information on the levels of environmental noise the attainment and maintenance of which in defined areas under various conditions are requisite to protect the public health and welfare with an adequate margin of safety.

The present document, and its approach to identifying noise levels based on cumulative noise exposure is in response to the expressed intent of the Congress that the Agency develop such a methodology. The EPA Report to the President and Congress, under Title IV, PL 91-60, contained considerable material on the various schemes for measuring and evaluating community noise response, and it contained a recommendation that the Federal government should make an assessment of the large number of varying systems, with a goal of "standardization, simplification, and interchangeability of data".

The need for such action was the subject of considerable Congressional interest in the hearings on the various noise control bills, which finally resulted in enactment of the Noise Control Act of 1972. The concept underlying this present document can be better appreciated from the following pertinent elements of the legislative history of the Act.

In the course of the hearings before the Subcommittee on Public Health and Environment of the Committee on Interstate and Foreign Commerce, House of Representatives ("Noise Control" HR Serial 92-30), the subject of the relation of physical noise measurements to human response was given considerable

attention. The Committee, in reporting the bill (House of Representatives Report No. 92-842, Noise Control Act of 1972), stated the following on this matter:

The Committee notes that most of the information relating to noise exposures was concerned with specific sources, rather than typical cumulative exposures to which urban and suburban dwellers are commonly exposed. There is a need for much greater effort to determine the magnitude and extent of such exposures and the Committee expects the EPA to promote studies on this subject and consider development of methods of uniform measurement of the impact of noise on communities.

The Committee went on in the Report to assign responsibility to the Administrator to coordinate all Federal noise programs, with a specific expression of concern over the "different systems of noise measurement" in use by the various Agencies. The following is especially important with respect to the purposes of this document:

The Committee gave some consideration to the establishment of a Federal ambient noise standard, but rejected the concept. Establishment of a Federal ambient standard would in effect put the Federal government in the position of establishing land use zoning requirements on the basis of noise. . . . It is the Committee's view that this function is one more properly of the states and their political subdivisions, and that the Federal Government should provide guidance and leadership in undertaking that effort.

The need for EPA action on this subject under the legislative authority of the Act was presented in Agency testimony before the Subcommittee on Air and Water Pollution, Committee on Public Works, U.S. Senate. The following portion is important (Noise Pollution Serial 92-H35 U.S. Senate):

A variety of specialized schemes have been evolved over the past years to quantify the relationship between these various conditions and their effects on humans. . . . Suffice it to say that no simplistic single number system can adequately provide for a uniform acceptable national ambient noise level value. This,

however, does not preclude the undertaking of a noise abatement strategy involving the proper use of the available scientific data on the part of the Federal Government in conjunction with the state and local governments. . . .The complex nature of the considerations we have outlined above in our judgment require that the Federal Government undertake to provide the necessary information upon which to base judgments. . . .

Taking both the specific language of the Act, cited above, and the legislative history discussed in the foregoing, EPA interprets Section 5(a)(2) as directing the Agency to identify levels based only on health and welfare effects and not on technical feasibility or economic costs.

Throughout this report, the words "identified level" are used to express the result of the inquiry mandated by Section 5(a)(2). The words "goals", "standards", or "recommended levels" are not used since they are not appropriate. Neither Congress nor the Environmental Protection Agency has reached the conclusion that these identified levels should be adopted by states and localities. This is a decision which the Noise Control Act clearly leaves to the states and localities themselves.

Certain of the statutory phrases in Section 5(a)(2) need further definition and discussion in order to make clear the purpose of this document. Congress required that EPA "publish information on environmental noise" levels. This mandate is basically one of "description". Such description is to be made in the specific context of "defined areas" and "under various conditions". The phrase "in defined areas under various conditions" is used in both a geographical and an activity sense, for example, indoors in a school classroom or outdoors adjacent to an urban freeway. It also requires consideration not only of the human activity involved, but also of the nature of the noise impact.

The next and last statutory phrase in Section 5(a)(2) is most important. It is that the noise levels are to be discussed on the basis of what is requisite to protect "the public health and welfare with an adequate margin of safety". The use of the words "public health" requires a statistical approach to determine the order of magnitude of the population affected by a given level of noise. The concept of a margin of safety implies that every sector of the population which would reasonably be exposed to adverse noise levels should be included by the specifically described levels.

The phrase "health and welfare" as used herein is defined as "complete physical, mental and social well-being and not merely the absence of disease and infirmity". This definition would take into account sub-clinical and subjective responses (e.g., annoyance or other adverse psychological reactions) of the individual and the public. As will be discussed below, the available data demonstrate that the most serious clinical health and welfare effect caused by noise is interference with the ability to hear. Thus, as used in this document, the phrase "health and welfare" will necessarily apply to those levels of noise that have been shown to interfere with the ability to hear.

The phrase "health and welfare" also includes personal comfort and well-being and the absence of mental anguish and annoyance. In fact, a considerable portion of the data available on the "health and welfare" effects of noise is expressed in terms of annoyance. However, "annoyance" is a description of the human reaction to what is described as noise "interference"; and though annoyance appears to be statistically quantifiable, it is a subjective reaction to interference with some desired human activity. From a legal standpoint,

annoyance per se is not a legal concept. Annoyance expresses the human response or results, not its cause. For this reason, the common law has never recognized annoyance as being a compensable injury, absent a showing of an interference with a personal or property right. Of the many community surveys on noise which have been conducted, speech interference emerges as the most tangible component of annoyance, whereas sleep and other kinds of activity interference are important, but less well-defined contributors. Thus, although it is important to understand the importance of annoyance as a concept, it is the actual interference with activity on which the levels identified in this document are based.

There was a great deal of concern during the preparation of this document that the levels identified would be mistakenly interpreted as Federal noise standards. The information contained in this document should not be so interpreted. The general purpose of this document is rather to discuss environmental noise levels requisite for the protection of public health and welfare without consideration of those elements necessary to an actual rule-making. Those elements not considered in this document include economic and technological feasibility and attitudes about the desirability of undertaking an activity which produces interference effects. Instead, the levels identified here will provide State and local governments as well as the Federal Government and the private sector with an informational point of departure for the purpose of decision-making.

An even more important, but related, point must be kept in mind when this document is read. The data on which the informational levels in this document are based are not "short run" or single event noises. Rather, they represent energy equivalent noise levels over a long period. For example, the exposure period which results in no more than 5 dB hearing loss at the identified level is a period of forty years.

The definition of "environmental noise" is provided in Section 3(11) of the Noise Control Act of 1972. "The term 'environmental noise' means the intensity, duration, and the character of sounds from all sources." As discussed earlier, it is the intent of Congress that a simple, uniform measure of noise be developed. Not all information contained in the noise environment can be easily considered and analyzed. Instead, for practical purposes, it needs to be condensed to result in one indicator of the environmental quantity and quality of noise which correlates with the overall long-term effects of noise on public health and welfare.

Many rating and evaluation procedures are available in the literature^{2,3} in voluntary national and international standards, and commonly used engineering practices, (see Appendix A). These methods and practices are well established, and it is not the purpose of this document to list them, elaborate on them or imply a restriction of their use. Instead, the purpose is to discuss levels of environmental noise using a measure which correlates with other measures and can be applied to most situations. Based on the concept of the cumulative human exposure to environmental noise associated with the various life styles of the population, maximum long-term exposures for individuals and the corresponding environmental noise levels at various places can be identified. It is important to keep in mind that the selected indicator of environmental noise does not correlate uniquely with any specific effect on human health or performance. Admittedly, there are uncertainties with respect to effects in individual cases and situations. Such effects cannot be completely accounted for, thus, the necessity to employ a statistical approach.

Section II of the report addresses the details of characterizing and measuring human exposure to environmental noise. The equivalent sound level (L_{eq}) and a variation weighted for nighttime exposure (L_{dn}) has been selected as the uniform descriptor. The relationship of L_{eq} and L_{dn} to other measures in use is analyzed in Appendix A. Section II and Appendix B further detail the various human exposure patterns and give simplified examples of individual exposure patterns. The problem of separating occupational exposure from the balance of environmental exposure and the statutory responsibility for controlling occupational exposure is analyzed in Appendix F.

In Section III, cause and effect relationships are summarized and presented as the basis and justification for the environmental noise levels identified in Section IV. Specifically, Section III develops conclusions with regard to levels at which hearing impairment and activity interference take place. These are discussed in terms of situational variation and the respective appropriateness of L_{eq} and L_{dn} . The factors providing for an adequate margin of safety and special types of noises are discussed. This section makes reference to material in Appendices C (on hearing loss), D (annoyance and activity interference) and G (special noises), which in turn rely upon material presented in EPA's document, Public Health and Welfare Criteria for Noise,² to which the reader is referred for more detailed information.

Section IV discusses the levels of environmental noise requisite to protect public health and welfare for various indoor and outdoor areas in the public and private domain in terms of L_{eq} and L_{dn} . The summary table is supplemented by short explanations.

It is obvious that the practical application of the levels to the various purposes outlined earlier requires considerations of factors not discussed here. Although some guidance in this respect is included in Section IV, not all problems can be anticipated and some of these questions can only be resolved as the information contained in this report is considered and applied. Such practical experiences combined with results of further research will guide EPA in revising and updating the levels identified. In this regard, it should be recognized that certain of the levels herein might well be subject to revision when additional data are developed,

II. ENVIRONMENTAL NOISE EXPOSURE

A complete physical description of a sound must describe its magnitude, its frequency spectrum, and the variations of both of these parameters in time. However, one must choose between the ultimate refinement in measurement techniques and a practical approach that is no more complicated than necessary to predict the impact of noise on people. The Environmental Protection Agency's choice for the measurement of environmental noise is based on the following considerations:

1. The measure should be applicable to the evaluation of pervasive long-term noise in various defined areas and under various conditions over long periods of time.
2. The measure should correlate well with known effects of the noise environment on the individual and the public .
3. The measure should be simple, practical and accurate. In principle, it should be useful for planning as well as for enforcement or monitoring purposes.
4. The required measurement equipment, with standardized characteristics, should be commercially available.
5. The measure should be closely related to existing methods currently in use.
6. The single measure of noise at a given location should be predictable, within an acceptable tolerance, from knowledge of the physical events producing the noise.

7. The measure should lend itself to small, simple monitors which can be left unattended in public areas for long periods of time.

These considerations, when coupled with the physical attributes of sound that influence human response, lead EPA to the conclusion that the magnitude of sound is of most importance insofar as cumulative noise effects are concerned. Long-term average sound level, henceforth referred to as equivalent sound level (L_{eq}), is considered the best measure for the magnitude of environmental noise to fulfill the above seven requirements. Several versions of equivalent sound level will be used for identifying levels of sound in specific places requisite to protect public health and welfare. These versions differ from each other primarily in the time intervals over which the sound levels are of interest, and the correction factor employed.

Equivalent A-weighted sound level is the constant sound level that, in a given situation and time period, conveys the same sound energy as the actual time-varying A-weighted sound.* The basic unit of equivalent sound levels is the decibel (see Appendix A), and the symbol for equivalent sound level is L_{eq} . Two sounds, one of which contains twice as much energy but lasts only half as long as the other, would be characterized by the same equivalent sound level; so would a sound with four times the energy lasting one fourth as long. The relation is often called the equal-energy rule. A more complete discussion of the computation of equivalent sound level, its evolution and application to environmental noise problems, and its relationship to other measures used to characterize environmental noise is provided in Appendix A.

* See Glossary for a detailed definition of terms. Note that when the term "sound level" is used throughout this document, it always implies the use of the A-weighting for frequency.

The following caution is called to the attention of those who may prescribe levels: It should be noted that the use of equivalent sound level in measuring environmental noise will not directly exclude the existence of very high noise levels of short duration. For example, an equivalent sound level of 60 dB over a twenty-four hour day would permit sound levels of 110 dB but would limit them to less than one second duration in the twenty-four hour period. Comparable relationships between maximum sound levels and their permissible durations can easily be obtained for any combination, relative to any equivalent sound level (see the charts provided in Appendix A).

Three basic situations are used in this document for the purpose of identifying levels of environmental noise:

1. Defined areas and conditions in which people are exposed to environmental noise for periods of time which are usually less than twenty-four hours, such as school classrooms, or occupational settings.
2. Defined areas and conditions in which people are exposed to environmental noise for extended periods of time, such as dwellings.
3. Total noise exposure of an individual, irrespective of area or condition.

Three versions of equivalent sound level are used in this document in order to accommodate the various modes of noise exposure that occur in these situations. They are distinguished by the periods of time over which they are averaged and the way in which the averaging is done.

1. L_{eq} for 8-hour work day ($L_{eq(8)}$): This is the equivalent A-weighted sound level (in decibels relative to 20 micropascals) computed over any

continuous time period of eight hours identified with the typical occupational exposure. As will be shown in later sections of this document, $L_{eq}(8)$ serves as a basis for identifying environmental noise which causes damage to hearing.

2. L_{eq} for 24-hour weighted for nighttime exposure (L_{dn}): This formula of equivalent level is used here to relate noise in residential environments to chronic annoyance by speech interference and in some part by sleep and activity interference. For these situations, where people are affected by environmental noise for extended periods of time, the natural choice of duration is the 24-hour day. Most noise environments are characterized by repetitive behavior from day to day, with some variation imposed by differences between weekday and weekend activity, as well as some seasonal variation. To account for these variations, it has been found useful to measure environmental noise in terms of the long-term yearly average of the daily levels.

In determining the daily measure of environmental noise, it is important to account for the difference in response of people in residential areas to noises that occur during sleeping hours as compared to waking hours. During nighttime, exterior background noises generally drop in level from daytime values. Further, the activity of most households decreases at night, lowering the internally generated noise levels. Thus, noise events become more intrusive at night, since the increase in noise levels of the event over background noise is greater than it is during the daytime.

Methods for accounting for these differences between daytime and nighttime exposures have been developed in a number of different noise assessment methods employed around the world, (see Appendix A). In general, the

method used is to characterize nighttime noise as more severe than corresponding daytime events; that is, to apply a weighting factor to noise that increases the numbers commensurate with their severity. Two approaches to identifying time periods have been employed: one divides the 24-hour day into two periods, the waking and sleeping hours, while the other divides the 24 hours into three periods -- day, evening, and night. The weighting applied to the non-daytime periods differs slightly among the different countries, but most of them weight nighttime activities by about 10 dB. The evening weighting, if used, is 5 dB.

An examination of the numerical values obtained by using two periods versus three periods per day shows that for any reasonable distribution of environmental noise levels, the two-period day and the three-period day are essentially identical; i.e., the 24-hour equivalent sound levels are equal within a few tenths of a decibel. Therefore, the simpler two-period day is used in this document, with daytime extending from 7 a.m. to 10 p.m. and nighttime extending from 10 p.m. to 7 a.m. The symbol for the 15-hour daytime equivalent sound level is L_d , the symbol for the 9-hour nighttime equivalent sound level is L_n , and the day-night weighted measure is symbolized as L_{dn} .

The L_{dn} is defined as the A-weighted average sound level in decibels (re 20 micropascals) during a 24-hour period with a 10 dB weighting applied to nighttime sound levels. Examples of the outdoor present day (1973) day-night noise level at typical locations are given in Figure 1.

3. L_{eq} for the 24-hour average sound level to which an individual is exposed ($L_{eq}(24)$): This situation is related to the cumulative noise exposure

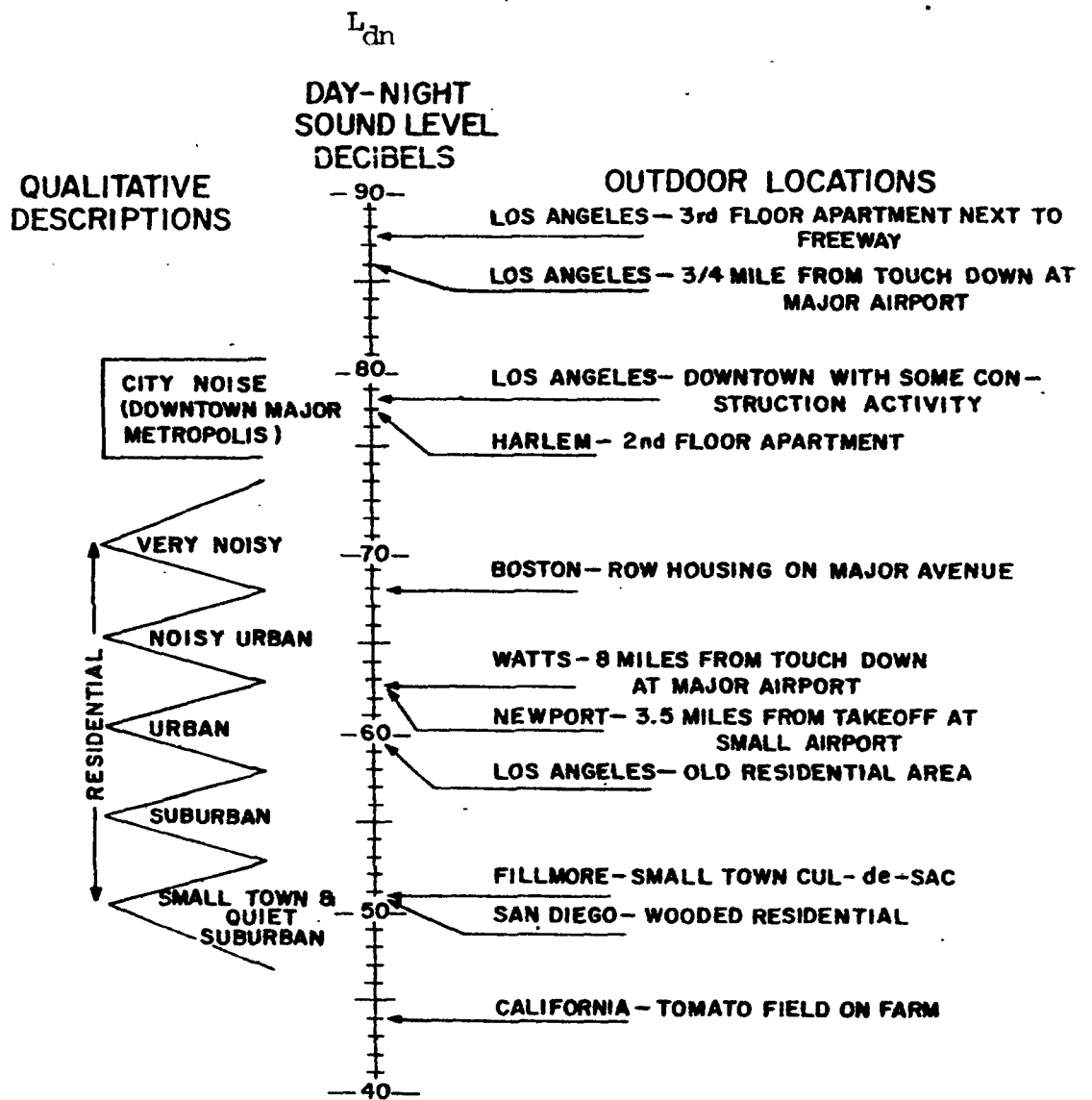


Figure 1 Outdoor Day-Night Sound Level in dB (re 20 micro-pascals) at Various Locations⁴

experienced by an individual irrespective of where, or under what situation, this exposure is received. The long-term health and welfare effects of noise on an individual are related to the cumulative noise exposure he receives over a lifetime.

Relatively little is known concerning the total effect of such lifetime exposures, but dose-effect relations have been studied for two selected situations:

a. The average long-term exposure to noise primarily in residential areas leading to annoyance reactions and complaints.

b. The long-term effects of occupational noise on hearing, with the daily exposure dose based on an eight-hour work day.

An ideal approach to identifying environmental noise levels in terms of their effect on public health and welfare would be to start by identifying the maximum noise not to be exceeded by individuals. However, the noise dose that an individual receives is a function of lifestyle. For example, exposure patterns of office workers, factory workers, housewives, and school children are quite different. Within each group the exposures will vary widely as a function of the working, recreational, and sleeping patterns of the individual. Thus, two individuals working in the same office will probably accumulate different total noise doses if they use different modes of transportation, live in different areas, and have different TV habits. Examples of these variations in noise dose for several typical life styles are provided in Appendix B. However, detailed statistical information on the distribution of actual noise doses and the relationship of these doses to long-term

health and welfare effects is still missing. Therefore, a realistic approach to this problem is to identify appropriate noise levels for places occupied by people as a function of the activity in which they are engaged, including a gross estimate of typical average exposure times.

From a practical viewpoint, it is necessary to utilize the wealth of data relating to occupational noise exposure, some of it, albeit, subject to interpretation, in order to arrive at extrapolations upon which the identification of safe levels for daily (24-hour) exposures can be based.

In the following sections of this report, the various modes of exposure to noise and the human responses elicited will be discussed, leading to the identification of appropriate noise exposure levels. In order to assist the reader in associating these levels with numerical values of noise for familiar situations, typical noise levels encountered at various locations are listed in Table 2. For further assistance, Figure 2 provides an estimate of outdoor noise levels for different residential areas.

III. RATIONALE FOR IDENTIFICATION OF LEVELS OF ENVIRONMENTAL NOISE REQUISITE TO PROTECT PUBLIC HEALTH AND WELFARE

A. Basis for Identifying Levels

For the identification of levels to protect against the direct, disease-producing effects of noise, protection against hearing loss is the guiding consideration. At this time, there is insufficient scientific evidence that non-auditory diseases are caused by noise levels lower than those that cause noise-induced hearing loss. In the event that future research renders this conclusion invalid, this document will be revised accordingly (See Appendix E).

TABLE 2

**EQUIVALENT SOUND LEVELS IN DECIBELS
NORMALLY OCCURRING INSIDE VARIOUS PLACES⁶**

Space	L_{eq} (+)
Small Store (1-5 clerks)	60
Large Store (more than 5 clerks)	65
Small Office (1-2 desks)	58
Medium Office (3-10 desks)	63
Large Office (more than 10 desks)	67
Miscellaneous Business	63
Residences	
Typical movement of people - no TV or radio	40 - 45
Speech at 10 feet, normal voice	55
TV listening at 10 feet, no other activity	55 - 60
Stereo music	50 - 70

(+) These measurements were taken over durations typical of the operation of these facilities.

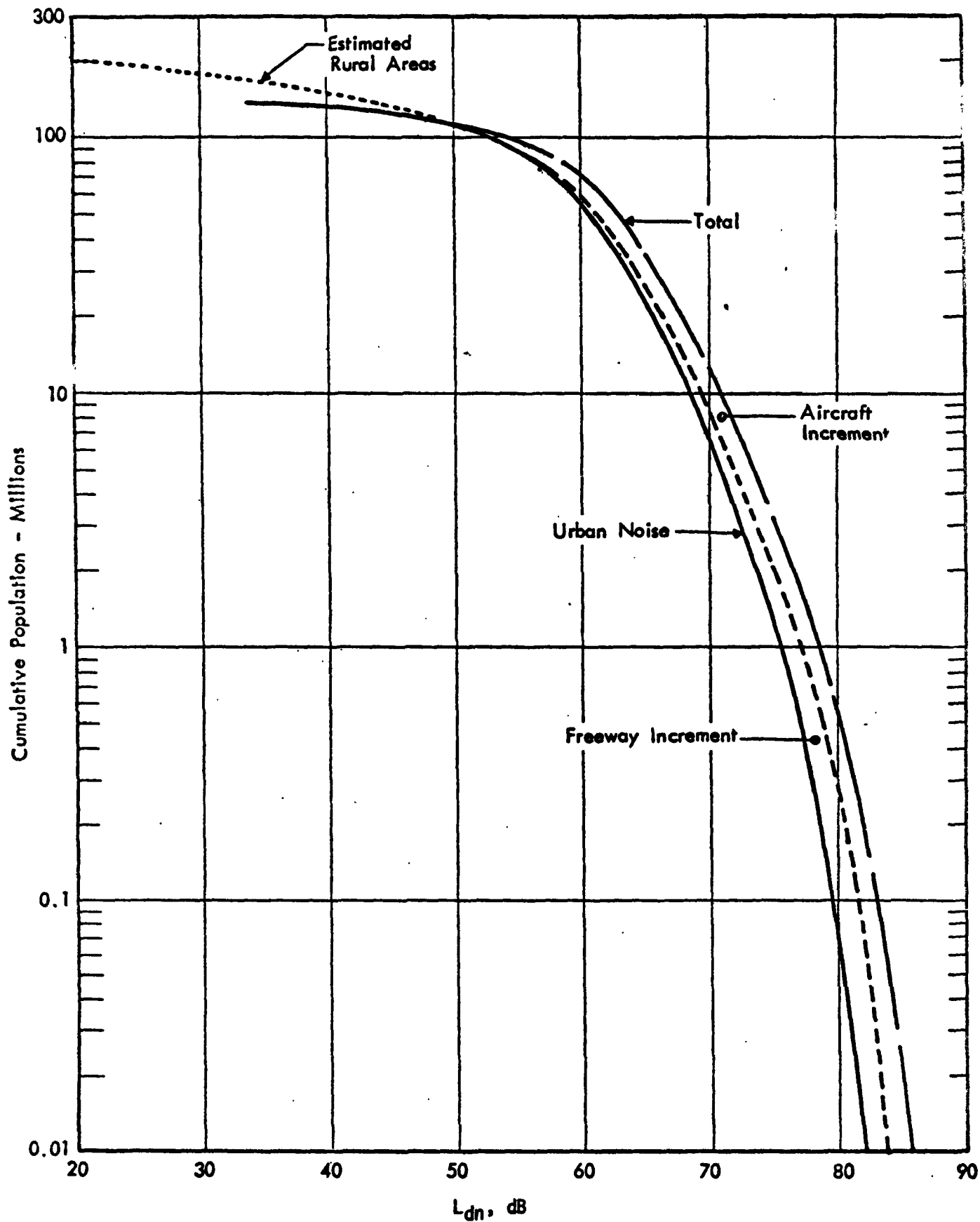


Figure 2 Residential Noise Environment of the National Population As A Function of Exterior Day-Night Average Sound Level (Ref B-5)

In addition to direct disease-producing health effects, interference by noise with various human activities, such as speech-perception, sleep, and thought can lead to annoyance and indirect effects on well-being. All of these direct and indirect effects are considered here as effects on public health and welfare. It is important to note, however, the distinction between voluntary and involuntary exposures. Exposures to high levels of environmental noise are often produced or sought by the individual. For example, voluntary exposures to loud music are common. Consequently, the concept of total individual noise dose with regard to annoyance, must be applied only to involuntary exposure, although, of course, this argument does not apply to the effects of noise on hearing.

A further consideration is the physical setting in which the exposure takes place. Although there are no data to justify the assumption, it is judged here that, whereas a small amount of speech interference in most outdoor places is not detrimental to public health and welfare, the same is not true for most indoor environments. Based on this reasoning, adequate protection of the public against involuntary exposure to environmental noise requires special consideration of physical setting and the communication needs associated with each.

In the following Subsection B, the above rationale is applied to identify the maximum noise level consistent with an adequate margin of safety for the general classes of sound found most often in the environment. Certain special classes of sound, such as infrasound, ultrasound, and impulsive sounds are discussed in Subsection C.

B. Identification of Maximum Exposure Levels to Avoid Significant Adverse Effects

1. Hearing

a. Basic Considerations

The following considerations have been applied in identifying the environmental noise levels requisite to protect the hearing of the general population. For detailed derivation, justification and references, (see Appendix C).

(1) The human ear, when damaged by noise, is typically affected at the 4000 Hz frequency first, and, therefore, this frequency can be considered the most noise-sensitive frequency. The averaged frequencies of 500 Hz, 1000 Hz and 2000 Hz have traditionally been employed in hearing conservation criteria because of their importance to the hearing of speech sounds. Since there is considerable evidence that frequencies above 2000 Hz are critical to the understanding of speech in lifelike situations, and since 4000 Hz is considered the most sensitive frequency, 4000 Hz has been selected as the most important frequency to be protected in this document.

(2) Changes in hearing level of less than 5 dB are generally not considered noticeable or significant.

(3) As individuals approach the high end of the distribution and their hearing levels are decreased, they become less affected by noise exposure. In other words, there comes a point where one cannot be damaged by sounds which one cannot hear.

(4) The noise level chosen protects against hearing loss up to and including the 96th percentile of the population, ranked according to decreasing ability to hear at 4000 Hz. By doing so, the percentiles above that point are also protected (see previous point), thereby protecting virtually the entire population against incurring more than a 5 dB noise-induced permanent threshold shift.

b. Explanation of Identified Level for Hearing Loss

Taking into account the assumptions and considerations mentioned above, the 8-hour exposure level which protects virtually the entire population from greater than 5 dB NIPTS is 73 dB, (see Figure 3). Before this value of 73 dB for 8-hour exposures can be applied to the environmental situation, however, certain correction or conversion factors must be considered. These correction factors are:

(1) Intermittency: allows the exposure level to be 5 dB higher. This correction factor is required because most environmental noise is intermittent (not at a steady level, but below 65 dBA more than 10% of any one-hour period) and intermittent noise has been shown less damaging than continuous noise of the same L_{eq} . This correction should normally be applied except in situations that do not meet this criterion for intermittency.

(2) Correction to yearly dose (250 to 365 days): requires reduction of the exposure level by 1.6 dB. All data used as the basis of Figure 3 come from occupational exposures which are only 250 days per year, whereas, this document must consider all 365 days in a year.

(3) Correction to twenty-four hour day: the identified level of 73 dB is based on 8-hour daily exposures. Conversion to a 24-hour

period using the equal-energy rule requires reduction of this level by 5 dB. This means that continuous sounds of a 24-hour duration must be 5 dB less intense than higher level sounds of only 8 hours duration, with the remaining 16 hours considered quiet.

Using the above corrections and conversions implies that the average 8-hr daily dose (based on a yearly average and assuming intermittent noise) should be no greater than $L_{eq}(8) = 73 + 5 - 1.6 = 76.4$ dB. Extending the duration to 24 hours would yield a value of 71.4 dB. For continuous noise, this value would be 66.4 dB. However, since environmental noise is intermittent, this level is below that which is considered necessary to protect public health and welfare. In view of possible statistical errors in the basic data, it is considered reasonable, especially with respect to a margin of safety, to round down from 71.4 dB to 70 dB. Therefore, the level of intermittent noise identified here for purposes of protection against hearing loss is:

$$L_{eq}(24) = 70 \text{ dB}$$

(For explanation of the relationship between exposures of $L_{eq}(8) = 75$ d and $L_{eq}(24) = 70$ dB, please see page 5.)

c. Adequate Margin of Safety

Section 5(a)(2), as stated previously, requires an adequate margin of safety. The level identified to protect against hearing loss, is based on three margin of safety considerations:

- (1) The level protects at the frequency where the ear is most sensitive (4,000 Hz).

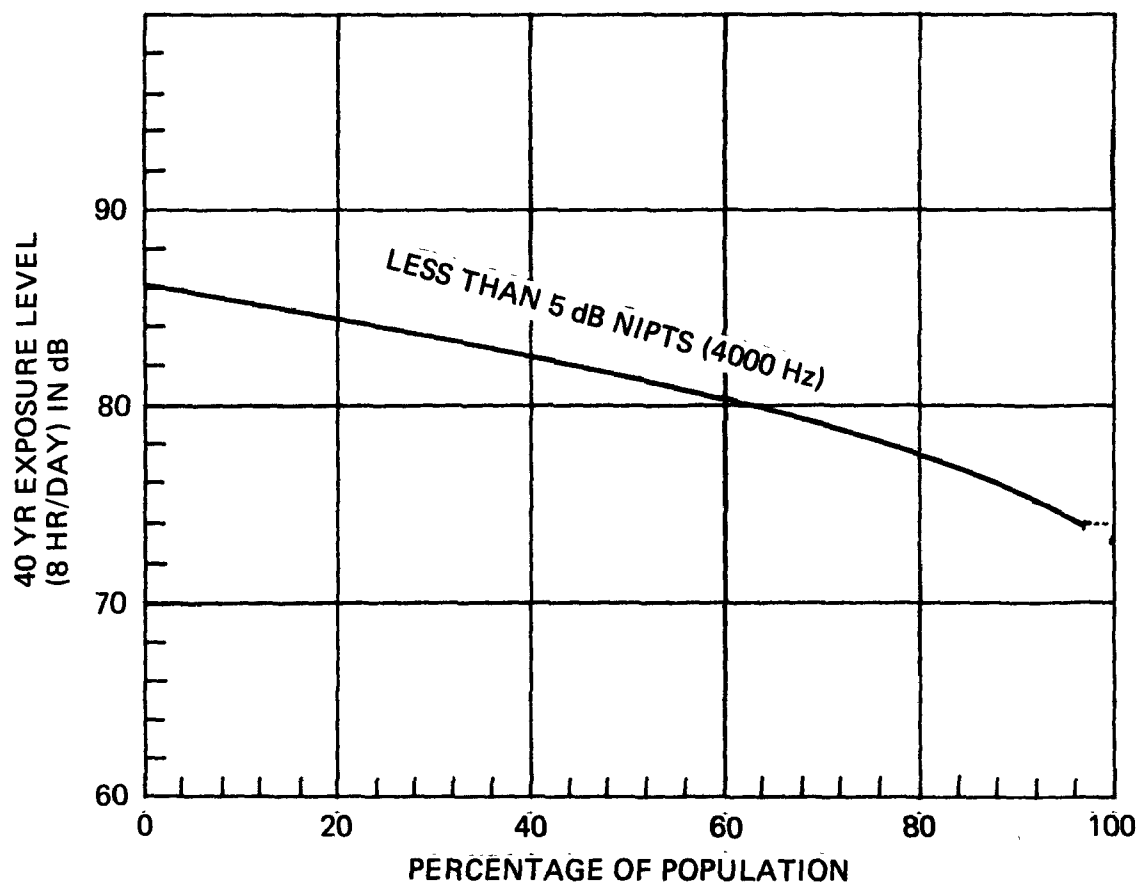


FIGURE 3 - Percentage of Exposed Population That Will Incur No More Than 5 dB NIPTS Shown as a Function of Exposure Level. Population Ranked by Decreasing Ability to Hear at 4000 Hz. (See Appendix C for Rationale).

(2) It protects virtually the whole population from exceeding 5 dB NIPTS.

(3) It rounds off in the direction of hearing conservation, (downward) to provide in part for uncertainties in analyzing the data.

2. Activity Interference/Annoyance

a. Basic Considerations

The levels of environmental noise which interfere with human activity (see Appendix D for detailed discussion) depend upon the activity and its contextual frame of reference; i.e., they depend upon "defined areas under various conditions". The effect of activity interference is often described in terms of annoyance. However, various non-level related factors, such as attitude towards the noise source and local conditions, may influence an individual's reaction to activity interferences.

The levels which interfere with listening to a desired sound, such as speech or music, can be defined in terms of the level of interfering sound required to mask the desired sound. Such levels have been quantified for speech communication by directly measuring the interference with speech intelligibility as a function of the level of the intruding sound, relative to the level of the speech sounds.

The levels interfering with human activities which do not involve active listening have not been as well quantified relative to the level of a desired sound. These relationships are more complicated because interference caused by an intruding sound depends upon the background level and the state of the human auditor; e.g., the degree of concentration when

endeavoring to accomplish a mental task, or the depth of sleep, etc. Fortunately, there is a wealth of survey data on community reaction to environmental noise which, although subject to some shortcomings when taken alone, can be used to supplement activity interference data to identify noise levels requisite to protect public health and welfare. Thus, the levels identified here primarily reflect results of research on community reaction and speech masking.

b) Identified Levels for Interference

The level identified for the protection of speech communication is an L_{eq} of 45 dB within the home in order to provide for 100% intelligibility of speech sounds. Allowing for the 15 dB reduction in sound level between outdoors and indoors (which is an average amount of sound attenuation that assumes partly-open windows), this level becomes an outdoor L_{eq} of 60 dB for residential areas. For outdoor voice communication, the outdoor L_{eq} of 60 dB allows normal conversation at distances up to 2 meters with 95% sentence intelligibility.

Although speech-interference has been identified as the primary interference of noise with human activities and is one of the primary reasons for adverse community reactions to noise and long-term annoyance, the 10 dB nighttime weighting (and, hence, the term L_{dn}) is applied to give adequate weight to all of the other adverse effects on activity interference. For the same reason, a 5 dB margin of safety is applied to the identified outdoor level. Therefore, the outdoor L_{dn} identified for residential areas is 55 dB. (See Appendix E for relationship of L_{eq} to L_{dn} .)

The associated interior day-night sound level within a typical home which results from outdoors is 15 dB less, or 40 dB due to the attenuation of the structure. The expected indoor daytime level for a typical neighborhood which has an outdoor L_{dn} of 55 dB is approximately 40 dB, whereas the nighttime

level is approximately 32 dB (see Figure A-7). This latter value is consistent with the limited available sleep criteria (D-5). Additionally, these indoor levels of 40 dB during the day and approximately 32 dB at night are consistent with the background levels inside the home which have been recommended by acoustical consultants as acceptable for many years, (see Table D-10).

The effects associated with an outdoor day-night sound level of 55 dB are summarized in Table 3. The summary shows that satisfactory outdoor average sentence intelligibility may be expected for normal voice conversations over distances of up to 3.5 meters; that depending on attitude and other non-level related factors, the average expected community reaction is none, although 1% may complain and 17% indicate "highly annoyed" when responding to social survey questions; and that noise is the least important factor governing attitude towards the area.

Identification of a level which is 5 dB higher than the 55 dB identified above would significantly increase the severity of the average community reaction, as well as the expected percentage of complaints and annoyance. Conversely, identification of a level 5 dB lower than the 55 dB identified above would reduce the indoor levels resulting from outdoor noise well below the typical background indoors, (see Table 3), and probably make little change in annoyance since at levels below the identified level, individual attitude and life style, as well as local conditions, seem to be more important factors in controlling the resulting magnitude of annoyance or community reaction than is the absolute magnitude of the level of the intruding noise.

TABLE 3

SUMMARY OF HUMAN EFFECTS IN TERMS OF SPEECH COMMUNICATION, COMMUNITY REACTION, COMPLAINTS, ANNOYANCE AND ATTITUDE TOWARDS AREA ASSOCIATED WITH AN OUTDOOR DAY/NIGHT SOUND LEVEL OF 55 dB re 20 MICROPASCALS

<u>Type of Effect</u>	<u>Magnitude of Effect</u>
Speech - Indoors	100% sentence intelligibility (average) with a 5 dB margin of safety
- Outdoors	100% sentence intelligibility (average) at 0.35 meters
	99% sentence intelligibility (average) at 1.0 meters
	95% sentence intelligibility (average) at 3.5 meters
Average Community Reaction	None evident; 7dB below level of significant "complaints and threats of legal action" and at least 16 dB below "vigorous action" (attitudes and other non-level related factors may affect this result)
Complaints	1% dependent on attitude and other non-level related factors
Annoyance	17% dependent on attitude and other non-level related factors
Attitudes Towards Area	Noise essentially the least important of various factors

(REF: Derived from Appendix D)

Accordingly, L_{dn} of 45 dB indoors and of 55 dB outdoors in residential areas are identified as the maximum levels below which no effects on public health and welfare occur due to interference with speech or other activity. These levels would also protect the vast majority of the population under most conditions against annoyance, in the absence of intrusive noises with particularly aversive content.

c. Adequate Margin of Safety

The outdoor environmental noise level identified in Table 3 provides a 5 dB margin of safety with respect to protecting speech communication. This is considered desirable for the indoor situation to provide for homes with less than average noise reduction or for persons speaking with less than average voice level. A higher margin of safety would be ineffective most of the time due to normal indoor activity background levels.

The 5 dB margin of safety is particularly desirable to protect the population against long-term annoyance with a higher probability than would be provided by the levels protecting indoor and outdoor speech communication capability alone. The 5 dB margin clearly shifts community response as well as subjective annoyance rating into the next lower response category than would be observed for the maximum level identified with respect to speech communication alone. According to present data, this margin of safety protects the vast majority of the population against long-term annoyance by noise. It would reduce environmental noise to a level where it is least important among environmental factors that influence the population's attitude toward the environment. To

define an environment that eliminates any potential annoyance by noise occasionally to some part of the population appears not possible at the present state of knowledge.

C. Maximum Exposures to Special Noises

1. Inaudible Sounds

The following sounds may occur occasionally but are rarely found at levels high enough to warrant consideration in most environments which the public occupies. For a more detailed discussion, see Appendix G.

a. Infrasound

Frequencies below 16 Hz are referred to as infrasonic frequencies and are not audible. Complaints associated with extremely high levels of infrasound can resemble a mild stress reaction and bizarre auditory sensations, such as pulsating and fluttering. Exposure to high levels of infrasound is rare for most individuals. Nevertheless, on the basis of existing data^{2,7}, the threshold of these effects is approximately 120 dB SPL (1-16 Hz). Since little information exists with respect to duration of exposure and its effects, and also since many of the data are derived from research in which audible frequencies were present in some amount, these results should be interpreted with caution.

b. Ultrasound

Ultrasonic frequencies are those above 20,000 Hz and are also generally inaudible. The effects of exposure to high intensity ultrasound is reported by some to be a general stress response. Exposure to high levels of ultrasound does not occur frequently. The threshold of any effects for ultrasound is 105 dB SPL². Again, many of these data may include frequencies

within the audible range, and results are, therefore, to be interpreted cautiously.

2. Impulse Noise

It is difficult to identify a single-number limit requisite to protect against adverse effects from impulse noise because it is essential to take into account the circumstances of exposure, the type of impulse, the effective duration, and the number of daily exposures, (see Appendix G).

a. Hearing

Review of temporary threshold shift data leads to the conclusion that the impulse noise limit requisite to prevent more than a 5 dB permanent hearing loss at 4000 Hz after years of daily exposure is a peak sound pressure level (SPL) of 145 dB. This level applies in the case of isolated events, irrespective of the type, duration, or incidence at the ear. However, for duration of 25 microseconds or less, a peak level of 167 dB SPL would produce the same effect, (see Figure 4).

(1) Duration Correction: When the duration of the impulse is less than 25 microseconds, no correction for duration is necessary. For durations exceeding 25 microseconds, the level should be reduced in accordance with the 'modified CHABA limit' shown in Figures 4, and G-1 of Appendix G.

(2) Correction for Number of Impulses:

Number of impulses per day:	1	10	100	10^3	10^4	
Correction factor:	0	-10	-20	-30	-40	dB

(More detailed information is provided in Figure 4.)

Furthermore, if the average interval between repeated impulses is between 1 and 10 seconds, a third correction factor of -5 dB is applied. Thus, to prevent hearing loss due to impulse noise, the identified level is 145 dB SPL, or 167 dB peak SPL for impulses less than 25 microseconds, for one impulse daily. For longer durations or more frequent exposures, the equivalent levels are as shown in Figure 4.

b. Non-Auditory Effects of Impulsive Sound

Impulses exceeding the background noise by more than about 10 dB are potentially startling or sleep-disturbing. If repeated, impulsive noises can be disturbing to some individuals if heard at all (they may be at levels below the average noise levels). However, no threshold level can be identified at this time; nor is there any clear evidence or documentation of any permanent effect on public health and welfare.

c. Sonic Booms

Little or no public annoyance is expected to result from one sonic boom during the daytime below the level of 0.75 pounds per square foot (psf) as measured on the ground (see Appendix G). The same low probability of annoyance is expected to occur for more than one boom per day if the peak level of each boom is no greater than:

$$\text{Peak Level} = \frac{0.75}{\sqrt{N}} \text{ psf}$$

Where N is the number of booms. This value is in agreement with the equal energy concept.

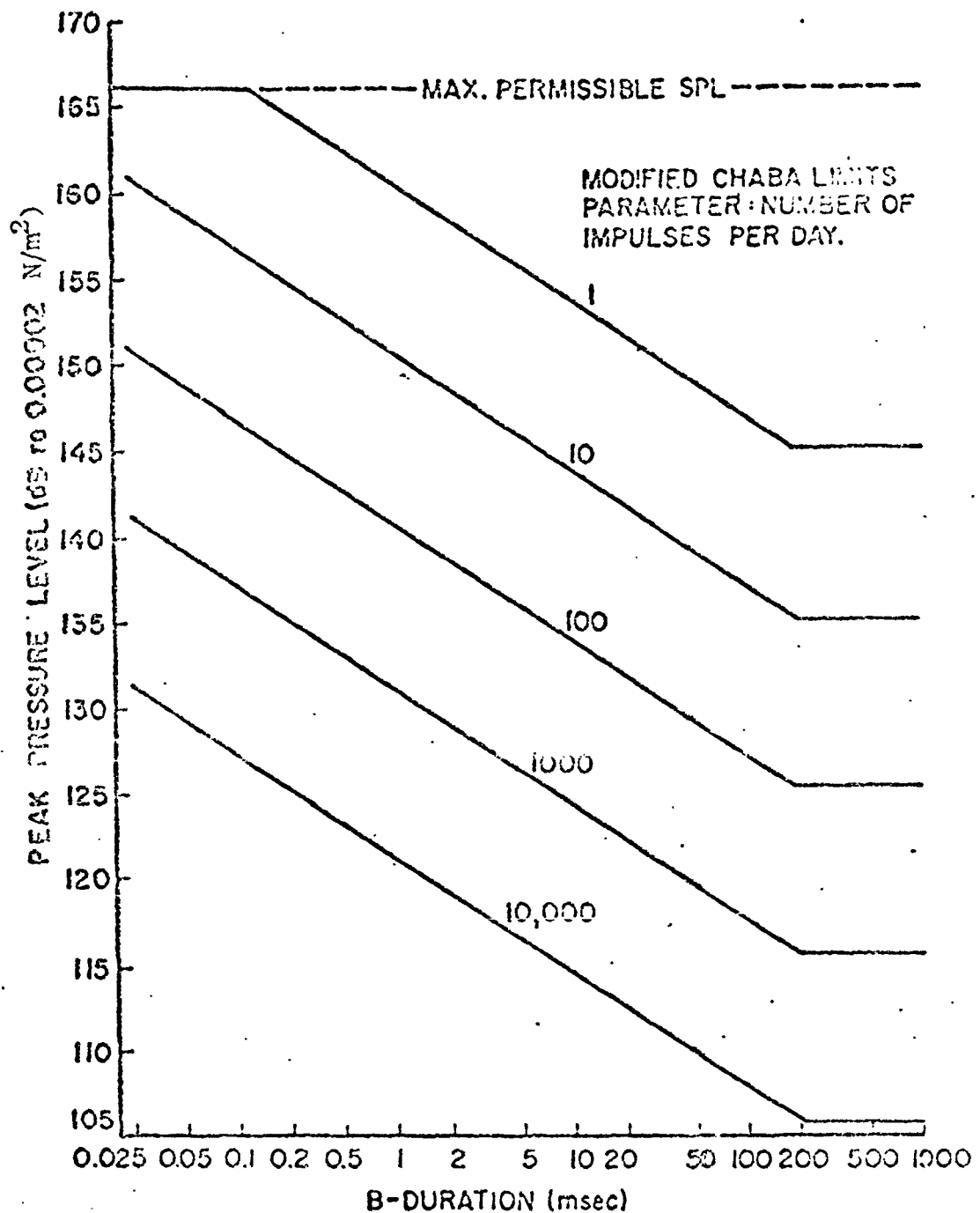


Figure 4 - Set of Modified CHABA Limits for Daily Exposure to Impulse Noises Having B-Durations in the Range 25 Microseconds to 1 Second. (Parameter: number (N) of impulses per daily exposure. Criterion: NIPTS not to exceed 5 dB at 4 kHz in more than 10% of people.)

(REF: Derived from Appendix G)

IV. IDENTIFIED LEVELS OF ENVIRONMENTAL NOISE IN DEFINED AREAS

A. Identified Levels

Table 4 identifies the levels requisite to protect public health and welfare with an adequate margin of safety for both activity interference and hearing loss. The table classifies the various areas according to the primary activities that are most likely to occur in each. The following is a brief description of each classification and a discussion of the basis for the identified levels in Table 4. For a more detailed discussion of hearing loss and activity interference, see Appendices C and D.

1. Residential areas are areas where human beings live, including apartments, seasonal residences, and mobile homes, as well as year-round residences. A quiet environment is necessary in both urban and rural residential areas in order to prevent activity interference and annoyance, and to permit the hearing mechanism to recuperate if it is exposed to higher levels of noise during other periods of the day.

An indoor L_{dn} of 45 dB will permit speech communication in the home, while an outdoor L_{dn} not exceeding 55 dB will permit normal speech communication at approximately three meters. Maintenance of this identified outdoor level will provide an indoor L_{dn} of approximately 40 dB with windows partly open for ventilation. The nighttime portion of this L_{dn} will be approximately 32 dB, which should in most cases, protect against sleep interference. An $L_{eq}(24)$

TABLE 4
YEARLY AVERAGE EQUIVALENT SOUND LEVELS IDENTIFIED AS REQUISITE TO
PROTECT THE PUBLIC HEALTH AND WELFARE WITH AN ADEQUATE MARGIN OF SAFETY

	Measure	Indoor		To protect against both effects (b)	Outdoor		To protect against both effects (b)
		Activity Interference	Hearing Loss Consideration		Activity Interference	Hearing Loss Consideration	
Residential with outside space and Farm Residences	L_{dn}	45		45	55		55
	$L_{eq}(24)$		70			70	
Residential with no outside Space	L_{dn}	45		45			
	$L_{eq}(24)$		70				
Commercial	$L_{eq}(24)$	(a)	70	70(c)	(a)	70	70(c)
Inside Transportation	$L_{eq}(24)$	(a)		(a)			
	$L_{eq}(24)$	(a)	70	(a)			
Industrial	$L_{eq}(24)$	(d) (a)	70	70 (c)	(a)	70	70 (c)
Hospitals	L_{dn}	45		45	55		55
	$L_{eq}(24)$		70			70	
Educational	$L_{eq}(24)$	45		45	55		55
	$L_{eq}(24)$	(d)	70			70	
Recreational areas	$L_{eq}(24)$	(a)	70	70 (c)	(a)	70	70 (c)
Farm Land and General Unpopulated Land	$L_{eq}(24)$				(a)	70	70 (c)

Explanation of identified level for hearing loss: The exposure period which results in hearing loss at the identified level is a period of 40 years.

- Code:
- Since different types of activities appear to be associated with different levels, identification of a maximum level for activity interference may be difficult except in those circumstances where speech communication is a critical activity. (See Figure D-2 for noise levels as a function of distance which allow satisfactory communication.)
 - Based on lowest level.
 - Based only on hearing loss.
 - An $L_{eq(8)}$ of 75 dB may be identified in these situations so long as the exposure over the remaining 16 hours per day is low enough to result in a negligible contribution to the 24-hour average, i.e., no greater than an L_{eq} of 60 dB.

*Refers to energy rather than arithmetic averages.

of 70 dB is identified as protecting against damage to hearing.

Although there is a separate category for commercial areas, commercial living accommodations such as hotels, motels, cottages, and inns should be included in the residential category since these are places where people sleep and sometimes spend extended periods of time.

2. Commercial areas include retail and financial service facilities, offices, and miscellaneous commercial services. They do not include warehouses, manufacturing plants, and other industrial facilities, which are included in the industrial classification. Although a level for activity interference has not been identified here (see footnote a), suggestions for such levels will be found in Table D-10 of Appendix D. On the other hand, a level of $L_{eq}(24)$ of 70 dB has been identified to protect against hearing loss.

3. Transportation facilities are included so as to protect individuals using public and private transportation. Included within this classification are commercial and private transportation vehicles. Identification of a level to protect against hearing loss is the only criterion used at this time, although levels lower than an L_{eq} of 70 dB are often desirable for effective speech communication. However, because of the great variety of conditions inside transportation vehicles, and because of the desirability of speech privacy in certain situations, a level based on activity interference cannot be identified for all modes of transportation at this time.

4. Industrial areas include such facilities as manufacturing plants, warehouses, storage areas, distribution facilities, and mining operations. Only a level for hearing loss is identified due to the lack of data with

respect to annoyance and activity interference. Where the noise exposure is intermittent, an $L_{eq}(24)$ of 70 dB is identified as the maximum level for protection of hearing from industrial exposure to intermittent noise. For 8-hour exposures, an $L_{eq}(8)$ of 75 dB is considered appropriate so long as the exposure over the remaining 16 hours per day is low enough to result in a negligible contribution to the 24-hour average.

5. Hospital areas include the immediate neighborhood of the hospital as well as its interior. A quiet environment is required in hospital areas because of the importance of sleep and adequate rest to the recovery of patients. The maintenance of a noise level not exceeding an L_{dn} of 45 dB in the indoor hospital environment is deemed adequate to prevent activity interference and annoyance. An outdoor L_{dn} of 55 dB should be adequate to protect patients who spend some time outside, as well as insuring an adequately protective indoor level. An $L_{eq}(24)$ of 70 dB is identified to prevent hearing loss.

6. Educational areas include classrooms, auditoriums, schools in general, and those grounds not used for athletics. The principal consideration in the education environment is the prevention of interference with activities, particularly speech communication. An indoor noise level not exceeding $L_{eq}(24)$ of 45 dB is identified as adequate to facilitate thought and communication. Since teaching is occasionally conducted outside the classroom, an outdoor $L_{eq}(24)$ of 55 dB is identified as the maximum level to prevent activity interference. To protect against hearing loss an $L_{eq}(24)$ of 70 dB is identified for both indoor and outdoor environments. As in the industrial situation, eight hours is generally the amount of time spent in educational facilities. Therefore an $L_{eq}(8)$ of 75 dB is considered appropriate to protect against hearing loss, so long as the exposure over the remaining

16 hours is low enough to result in a negligible contribution to the 24-hour average.

7. Recreational areas include facilities where noise exposure is voluntary. Included within this classification are nightclubs, theaters, stadiums, racetracks, beaches, amusement parks, and athletic fields. Since sound exposure in such areas is usually voluntary, there is seldom any interference with the desired activity. Consequently, the chief consideration is the protection of hearing. An $L_{eq(24)}$ of 70 dB is therefore identified for intermittent noise in order to prevent hearing damage.

8. Farm and general Unpopulated Land primarily includes agricultural property used for the production of crops or livestock. For such areas, the primary considerations are the protection of human hearing and the prevention of adverse effects on domestic and wild animals. Protection of hearing requires that an individual's exposure to intermittent noise ~~does~~ not exceed $L_{eq(24)}$ of 70 dB. A separate level for the exposure of animals is not identified due to the lack of data indicating that hearing damage risk for animals is substantially different from that of humans. The unpopulated areas include wilderness areas, parks, game refuges, and other areas that are set aside to provide enjoyment of the outdoors. Although quiet is not always of paramount importance in such areas, many individuals enjoy the special qualities of serenity and tranquility found in natural areas. At this time it is not possible to identify an appropriate level to prevent activity interference and annoyance. However, when it becomes possible to set such a level, a clear distinction should be made between natural and man-made noise.

B. Use of Identified Environmental Noise Levels

One of the purposes of this document is to provide a basis for judgment by states and local governments as a basis for setting standards. In doing so the information contained in this document must be utilized along with other relevant factors. These factors include the balance between costs and benefits associated with setting standards at particular noise levels, the nature of the existing or projected noise problems in any particular area, the local aspirations and the means available to control environmental noise.

In order to bring these factors together, states, local governments and the public will need to evaluate in a systematic manner the following:

1. The magnitude of existing or projected noise environments in defined areas as compared with the various levels identified in this document.
2. The community expectations for noise abatement with respect to existing or projected conditions.
3. The affected elements of the public and the degree of impact of present or projected environmental noise levels.
4. The noise sources, not controlled by Federal regulations, that cause local noise problems.
5. Methods available to attack environmental noise problems (use limitations, source control through noise emission standards, compatible land use planning, etc.).
6. The costs inherent in reducing noise to certain levels and benefits achieved by doing so.

7. The availability of technology to achieve the desired noise reduction.

The levels of environmental noise identified in this report provide the basis for assessing the effectiveness of any noise abatement program. These noise levels are identified irrespective of the nature of any individual noise source. One of the primary purposes of identifying environmental noise levels is to provide a basis by which noise source emission regulations, human exposure standards, land use planning, zoning, and building codes may be assessed, as to the degree with which they protect the public health and welfare with respect to noise. Such regulatory action must consider technical feasibility and economic reasonableness, the scale of time over which results can be expected, and the specific problems of enforcement. In the process of balancing these conflicting elements, the public health and welfare consequence of any specific decision can be determined by comparing the resultant noise environment against the environmental noise levels identified in this report.

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APPENDICES

GLOSSARY

I. Definitions

AUDIBLE RANGE (OF FREQUENCY) (AUDIO-FREQUENCY RANGE). The frequency range 16 Hz to 20,000 Hz (20 kHz). Note: This is conventionally taken to be the normal frequency range of human hearing.

AUDIOMETER. An instrument for measuring the threshold or sensitivity of hearing.

AUDIOMETRY. The measurement of hearing.

BROAD-BAND NOISE. Noise whose energy is distributed over a broad range of frequency (generally speaking, more than one octave).

CONTINUOUS NOISE. On-going noise whose intensity remains at a measurable level (which may vary) without interruption over an indefinite period or a specified period of time.

DEAFNESS. 100 percent impairment of hearing associated with an otological condition. Note: This is defined for medical and cognate purposes in terms of the hearing threshold level for speech or the average hearing threshold level for pure tones of 500, 1000 and 2000 Hz in excess of 92 dB.

EQUIVALENT SOUND LEVEL. The level of a constant sound which, in a given situation and time period, has the same sound energy as does a time-varying sound. Technically, equivalent sound level is the level of the time-weighted, mean square, A-weighted sound pressure. The time interval over which the measurement is taken should always be specified.

ENVIRONMENTAL NOISE. By Sec 3 (11) of the Noise Control Act of 1972, the term "environmental noise" means the intensity, duration, and character of sounds from all sources.

- HEARING LEVEL.** The difference in sound pressure level between the threshold sound for a person (or the median value or the average for a group) and the reference sound pressure level defining the ASA standard audiometric threshold (ASA: 1951). Note: The term is now commonly used to mean hearing threshold level (qv). Units: decibels.
- HEARING LOSS.** Impairment of auditory sensitivity: an elevation of a hearing threshold level.
- HEARING THRESHOLD LEVEL.** The amount by which the threshold of hearing for an ear (or the average for a group) exceeds the standard audiometric reference zero (ISO, 1964; ANSI, 1969). Units: decibels.
- IMPULSE NOISE (IMPULSIVE NOISE).** Noise of short duration (typically, less than one second) especially of high intensity, abrupt onset and rapid decay, and often rapidly changing spectral composition. Note: Impulse noise is characteristically associated with such sources as explosions, impacts, the discharge of firearms, the passage of super-sonic aircraft (sonic boom) and many industrial processes.
- INFRASONIC.** Having a frequency below the audible range for man (customarily deemed to cut off at 16 Hz).
- INTERMITTENT NOISE.** Fluctuating noise whose level falls once or more times to low or unmeasurable values during an exposure. In this document intermittent noise will mean noise that is below 65 dBA at least 10% of any 1 hour period.
- NOISE EXPOSURE.** The cumulative acoustic stimulation reaching the ear or the person over a specified period of time (eg, a work shift, a day, a working life, or a lifetime).
- NOISE HAZARD (HAZARDOUS NOISE).** Acoustic stimulation of the ear which is likely to produce noise-induced permanent threshold shift in some of a population.

NOISE-INDUCED PERMANENT THRESHOLD SHIFT (NIPTS). Permanent threshold shift caused by noise exposure, corrected for the effect of aging (presbycusis).

NOISE-INDUCED TEMPORARY THRESHOLD SHIFT (NITTS). Temporary threshold shift caused by noise exposure.

NON-VOLUNTARY EXPOSURE TO ENVIRONMENTAL NOISE. The exposure of an individual to sound which (1) the individual cannot avoid or (2) the sound serves no useful purpose (e.g., the exposure to traffic noise or exposure to noise from a lawn mower).

OCCUPATIONAL EXPOSURE TO ENVIRONMENTAL NOISE. The noise exposure of an individual defined under P.L. 91-596, Occupational Safety and Health Act of 1970.

OTOLOGICALLY NORMAL. Enjoying normal health and freedom from all clinical manifestations and history of ear disease or injury; and having a patent (wax-free) external auditory meatus.

PEAK SOUND PRESSURE. The absolute maximum value (magnitude) of the instantaneous sound pressure occurring in a specified period of time.

PRESBYACUSIS (PRESBYCUSIS). Hearing loss, chiefly involving the higher audiometric frequencies above 3000 Hz, ascribed to advancing age.

RISK. That percentage of a population whose hearing level, as a result of a given influence, exceeds the specified value, minus that percentage whose hearing level would have exceeded the specified value in the absence of that influence, other factors remaining the same. Note: The influence may be noise, age, disease, or a combination of factors.

SOUND LEVEL. The quantity in decibels measured by a sound level meter satisfying the requirements of American National Standards Specification for Sound Level Meters S1.4-1971. Sound level is the frequency-weighted sound pressure level obtained with the standardized dynamic characteristic "fast" or "slow" and weighting A, B, or C; unless indicated otherwise, the A-weighting is understood. The unit of any sound level is the decibel, having the unit symbol dB.

SOUND EXPOSURE LEVEL. The level of sound accumulated over a given time interval or event. Technically, the sound exposure level is the level of the time-integrated mean square A-weighted sound for a stated time interval or event, with a reference time of one second.

SOUND PRESSURE LEVEL. In decibels, 20 times the logarithm to the base ten of the ratio of a sound pressure to the reference sound pressure of 20 micropascals (20 micronewtons per square meter). In the absence of any modifier, the level is understood to be that of a mean-square pressure.

SPEECH DISCRIMINATION. The ability to distinguish and understand speech signals.

TEMPORARY THRESHOLD SHIFT (TTS). That component of threshold shift which shows a progressive reduction with the passage of time after the apparent cause has been removed.

THRESHOLD OF HEARING (AUDIBILITY). The minimum effective sound pressure level of an acoustic signal capable of exciting the sensation of hearing in a specified proportion of trials in prescribed conditions of listening.

ULTRASONIC. Having a frequency above the audible range for man (conventionally deemed to cut off at 20,000 Hz).

II. Abbreviations

AAOO	American Academy of Ophthalmology and Otolaryngology
AFR	Air Force Regulation
AI	Articulation Index
AMA	American Medical Association
ANSI	American National Standards Institute (formerly USASI)
ASHA	American Speech and Hearing Association
CHABA	Committee on Hearing and Bio-Acoustics
dBA	A-weighted decibel (decibels). Also written dB(A).
EPA	Environmental Protection Agency
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
NIOSH	National Institute for Occupational Safety and Health
NIPTS	Noise-Induced Permanent Threshold Shift
NITTS	Noise-Induced Temporary Threshold Shift
NPL	Noise Pollution Level (also National Physical Laboratory in England,
NR	Noise Rating
OSHA	Occupational Safety and Health Act
RMS	Root Mean Square
SIL	Speech Interference Level
SPL	Sound Pressure Level
TTS	Temporary Threshold Shift
TTS ₂	TTS determined 2 minutes after cessation of exposure

III. Symbols

$L(t)$	Time-varying noise level
L_A	A-weighted sound level
L_b	"Background" or "residual" sound level, A-weighted
L_d	Daytime equivalent A-weighted sound level between the hours of 0700 and 2200
L_e	Sound exposure level - the level of sound accumulated during a given event.
L_{dn}	Day-night average sound level - the 24 hour A-weighted equivalent sound level, with a 10 decibel penalty applied to nighttime levels
L_{eq}	Equivalent A-weighted sound level over a given time interval
$L_{eq}(8)$	Equivalent A-weighted sound level over eight hours
$L_{eq}(24)$	Equivalent A-weighted sound level over 24 hours
L_h	Hourly equivalent A-weighted sound level
L_n	Nighttime equivalent A-weighted sound level between the hours of 2200 and 0700
L_{max}	Maximum A-weighted sound level for a given time interval or event
L_x	X-percent sound level, the A-weighted sound level equaled or exceeded x% of time
ΔL	Difference in decibels between two different A-weighted sound levels

APPENDIX A

EQUIVALENT SOUND LEVEL AND ITS RELATIONSHIP TO OTHER NOISE MEASURES

I. Development of Equivalent Sound Level

The accumulated evidence of research on human response to sound indicates clearly that the magnitude of sound as a function of frequency and time are basic indicators of human response to sound. These factors are reviewed here, and it is concluded that it is not necessary to invent a new concept for the purpose of identifying levels of environmental noise.

A. Magnitude

Sound is a pressure fluctuation in the air; the magnitude of the sound describes the physical sound in the air; (loudness, on the other hand, refers to how people judge the sound when they hear it). Magnitude is stated in terms of the amplitude of the pressure fluctuation. The range of magnitude between the faintest audible sound and the loudest sound the ear can withstand is so enormous (a ratio of about 1,000,000 to 1) that it would be very awkward to express sound pressure fluctuations directly in pressure units. Instead, this range is "compressed" by expressing the sound pressure on a logarithmic scale. Thus, sound is described in terms of the sound pressure level (SPL), which is ten times the common logarithm of the ratio of the square of the sound pressure in question to the square of a (stated or understood) reference sound pressure, almost always 20

micropascals. * Or, in mathematical terms, sound pressure level L expressed in decibels is:

$$L = 10 \log \left(\frac{p^2}{p_o^2} \right) \quad (\text{Eq. A-1})$$

where p is the pressure fluctuation and p_o is the reference pressure.

B. Frequency Characteristics of Noise

The response of human beings to sound depends strongly on the frequency of sound. In general, people are less sensitive to sounds of low frequency, such as 100 hertz (Hz)** , than to sounds at 1000 Hz; also at high frequencies such as 8000 Hz, sensitivity decreases. Two basic approaches to compensate for this difference in response to different frequencies are (1) to segment the sound pressure spectrum into a series of contiguous frequency bands by electrical filters so as to display the distribution of sound energy over the frequency range; or (2) to apply a weighting to the overall spectrum in such a way that the sounds at various frequencies are weighted in much the same way as the human ear hears them.

In the first approach a sound is segmented into sound pressure levels in 24 different frequency bands, which may be used to calculate an estimate of the "loudness" or "noisiness" sensation which the sound may be expected to cause. This form of analysis into bands

*One pascal = one newton per square meter.

**Hertz is the international standard unit of frequency, until recently called cycles per second ; it refers to the number of pressure fluctuations per second in the sound wave.

is usually employed when detailed engineering studies of noise sources are required. It is much too complicated for monitoring noise exposure.

To perform such analysis, especially for time-varying sounds, requires a very complex set of equipment. Fortunately, much of this complication can be avoided by using approach 2 , i.e., by the use of a special electrical weighting network in the measurement system. This network weights the contributions of sounds of different frequency so that the response of the average human ear is simulated. Each frequency of the noise then contributes to the total reading an amount approximately proportional to the subjective response associated with that frequency. Measurement of the overall noise with a sound level meter incorporating such a weighting network yields a single number, such as the A-weighted Sound Level, or simply A-level, in decibels. For zoning and monitoring purposes, this marks an enormous simplification. For this reason, the A-level has been adopted in large-scale surveys of city noise coming from a variety of sources. It is widely accepted as an adequate way to deal with the ear's differing sensitivity to sounds of different frequency, including assessment of noise with respect to its potential for causing hearing loss. Despite the fact that more detailed analysis is frequently required for engineering noise control, the results of such noise control are adequately described by the simple measure of sound level.

One difficulty in the use of a weighted sound level is that psychoacoustic judgment data indicate that effects of tonal components are sometimes not adequately accounted for by a simple sound level. Some current ratings attempt to correct for tonal components; for example, in the present aircraft noise certification procedures, "Noise Standards: Aircraft Type Certification," FAR Part 36, the presence of tones is identified by a complex frequency analysis procedure. If the tones protrude above the adjacent random noise spectrum, a penalty is applied beyond the direct calculation of perceived noise level alone. However, the complexities involved in accounting for tones exceed practicable limits for monitoring noise in the community or other defined areas. Consequently, EPA concludes that, where appropriate, standards for new products will address the problem of tones in such a way that manufacturers will be encouraged to minimize them and, thus, ultimately they will not be a significant factor in environmental noise.

With respect to both simplicity and adequacy for characterizing human response, a frequency-weighted sound level should be used for the evaluation of environmental noise. Several frequency weightings have been proposed for general use in the assessment of response to noise, differing primarily in the way sounds at frequencies between 1000 and 4000 Hz are evaluated. The A-weighting, standardized in current sound level meter specifications, has been widely used for transportation and community noise description.^{A-1} For many noises

the A-weighted sound level has been found to correlate as well with human response as more complex measures, such as the calculated perceived noise level or the loudness level derived from spectral analysis.^{A-2} However, psychoacoustic research indicates that, at least for some noise signals, a different frequency weighting which increases the sensitivity to the 1000-4000 Hz region is more reliable.^{A-3} Various forms of this alternative weighting function have been proposed; they will be referred to here as the type "D-weightings". None of these alternative weightings has progressed in acceptance to the point where a standard has been approved for commercially available instrumentation.

It is concluded that a frequency-weighted sound pressure level is the most reasonable choice for describing the magnitude of environmental noise. In order to use available standardized instrumentation for direct measurement, the A frequency weighting is the only suitable choice at this time.* The indication that a type

D-weighting might ultimately be more suitable than the A-weighting for evaluating the integrated effects of noise on people suggests that at such time as a type D-weighting becomes standardized and available in commercial instrumentation, its value as the weighting for environmental noise should be considered to determine if a change from the A-weighting is warranted.

*All sound levels in this report are A-weighted sound pressure levels in decibels with reference to 20 micropascals.

C. Time Characteristics of Noise

The dominant characteristic of environmental noise is that it is not steady--at any particular location the noise usually fluctuates considerably, from quiet at one instant to loud the next. Thus, one cannot simply say that the noise level at a given location or that experienced by a person at that location is "so many decibels" unless a suitable method is used to average the time-varying levels. To describe the noise completely requires a statistical approach. Consequently, one should consider the 'noise exposure which is received by an individual moving through different noisy spaces. This exposure is related to the whole time-varying pattern of sound levels. Such a noise exposure can be described by the cumulative distribution of sound levels, showing exactly what percent of the whole observation period each level was exceeded.

A complete description of the noise exposure would distinguish between daytime, evening and nighttime, and between weekday and weekend noise level distributions. It would also give distributions to show the difference between winter and summer, fair weather and foul.

The practical difficulty with the statistical methodology is that it yields a large number of statistical parameters for each measuring location; and even if these were averaged over more or less homogeneous neighborhoods, it still would require a large set of numbers to characterize the noise exposure in that neighborhood. It

is literally impossible for any such array of numbers to be effectively used either in an enforcement context or to map existing noise exposure baselines.

It is essential, therefore, to look further for a suitable single-number measure of noise exposure. Note that the ultimate goal is to characterize with reasonable accuracy the noise exposure of whole neighborhoods (within which there may actually exist a fairly wide range of noise levels), so as to prevent extremes of noise exposure at any given time, and to detect unfavorable trends in the future noise climate. For these purposes, pinpoint accuracy and masses of data for each location are not required, and may even be a hindrance, since one could fail to see the forest for the trees.

A number of methodologies for combining the noise from both individual events and quasi-steady state sources into measures of cumulative noise exposure have been developed in this country and in other developed nations, e.g., Noise Exposure Forecast, Composite Noise Rating, Community Noise Equivalent Level, Noise and Number Index, and Noise Pollution Level. Many of these methodologies, while differing in technical detail (primarily in the unit of measure for individual noise events), are conceptually similar and correlate fairly well with each other. Further, using any one of these methodologies, the relationships between cumulative noise exposure and community annoyance ^{A-4, A-5} also correlate fairly well. It is therefore unnecessary to invent a new concept for the purpose of identifying levels of environmental noise. Rather, it is possible to select

a consistent measure that is based on existing scientific and practical experience and methodology and which meets the criteria presented in Section II of the body of this document. Accordingly, the Environmental Protection Agency has selected the Equivalent Sound Level (L_{eq}) for the purpose of identifying levels of environmental noise.

Equivalent Sound Level is formulated in terms of the equivalent steady noise level which in a stated period of time would contain the same noise energy as the time-varying noise during the same time period.

The mathematical definition of L_{eq} for an interval defined as occupying the period between two points in time t_1 and t_2 is:

$$L_{eq} = 10 \log \left[\frac{1}{t_2 - t_1} \int_{t_1}^{t_2} \frac{p^2(t)}{p_0^2} dt \right] \quad (\text{Eq. A-2})$$

where $p(t)$ is the time varying sound pressure and p_0 is a reference pressure taken as 20 micropascals.

The concept of Equivalent Sound Level was developed in both the United States and Germany over a period of years. Equivalent level was used in the 1957 original Air Force Planning Guide for noise from aircraft operations,^{A-6} as well as in the 1955 report^{A-7} on criteria for short-time exposure of personnel to high intensity jet aircraft noise, which was the forerunner of the 1956 Air Force

Regulation^{A-8} on "Hazardous Noise Exposure". A more recent application is the development of CNEL (Community Noise Equivalent Level) measure for describing the noise environment of airports. This measure, contained in the Noise Standards, Title 4, Subchapter 6, of the California Administrative Code (1970) is based upon a summation of L_{eq} over a 24-hour period with weightings for exposure during evening and night periods.

The Equivalent Noise Level was introduced in 1965 in Germany as a rating specifically to evaluate the impact of aircraft noise upon the neighbors of airports.^{A-9} It was almost immediately recognized in Austria as appropriate for evaluating the impact of street traffic noise in dwellings,^{A-10} and in schoolrooms.^{A-11} It has been embodied in the National Test Standards of both East Germany^{A-12} and West Germany^{A-13} for rating the subjective effects of fluctuating noises of all kinds, such as from street and road traffic, rail traffic, canal and river ship traffic, aircraft, industrial operations (including the noise from individual machines), sports stadiums, playgrounds, etc. It is the rating used in both the East German^{A-14} and West German^{A-15} standard guidelines for city planning. It was the rating that proved to correlate best with subjective response in the large Swedish traffic noise survey of 1966-67. It has come into such general use in Sweden for rating noise exposure that commercial instrumentation is currently available for measuring L_{eq} directly; the lightweight unit is small enough to be held in one hand and can be operated either from batteries or an electrical outlet.^{A-16}

The concept of representing a fluctuating noise level in terms of a steady noise having the same energy content is widespread in recent research, as shown in the EPA report on Public Health and Welfare Criteria for Noise (1973). There is evidence that it accurately describes the onset and progress of permanent noise-induced hearing loss,^{A-17} and substantial evidence to show that it applies to annoyance in various circumstances.^{A-18} The concept is borne out by Pearsons' experiments^{A-19} on the trade-off of level and duration of a noisy event and by numerous investigations of the trade-off between number of events and noise level in aircraft flyovers.^{A-20} Indeed, the Composite Noise Rating^{A-21} is a formulation of L_{eq} , modified by corrections for day vs. night operations. The concept is embodied in several recommendations of the International Standards Organization, for assessing the noise from aircraft,^{A-22} industrial noise as it affects residences,^{A-23} and hearing conservation in factories.^{A-24}

II. Computation of Equivalent Sound Level

In many applications, it is useful to have analytic expressions for the equivalent sound level L_{eq} in terms of simple parameters of the time-varying noise signal so that the integral does not have to be computed. It is often sufficiently accurate to approximate a complicated time-varying noise level with simple time patterns. For example, industrial noise can often be considered in terms of a specified noise level that is either on or off as a function of time. Similarly, individual aircraft or motor vehicle noise events can be considered to exhibit triangular time patterns that occur

intermittently during a period of observation. (Assuming an aircraft flyover time pattern to be triangular in shape instead of shaped like a "normal distribution function" introduces an error of, at worst, 0.8 dB). Other noise histories can often be approximated with trapezoidal time pattern shapes.

The following sections provide explicit analytic expressions for estimating the equivalent sound level in terms of such time patterns, and graphic design charts are presented for easy application to practical problems. Most of the design charts are expressed in terms of the amount (ΔL) that the level (L) of the new noise source exceeds an existing background noise level, L_b . ($\Delta L = L - L_b$). This background noise may be considered as the equivalent sound level that existed before the introduction of the new noise, provided that its fluctuation is small relative to the maximum value of the new noise level.

A. Constant Level Noise - Steady or Intermittent

The L_{eq} for a continuous noise having a constant value of L_{max} is

$L_{eq} = L_{max}$, which is derived from

$$L_{eq} = 10 \log \frac{1}{T} \int_0^T 10^{\left(\frac{L_{max}}{10}\right)} dt = L_{max} \text{ (dB)} \quad (\text{Eq. A-3})$$

When L_{max} is intermittently on during the time period T for a fraction x of the total time, with a background noise level L_b present for the time fraction $(1-x)$, L_{eq} is given by:

$$L_{eq} = L_b + 10 \log \left[(1-x) + x \left(10^{\frac{\Delta L}{10}} \right) \right] \text{ (dB)} \quad (\text{Eq. A-4})$$

where $\Delta L = L_{max} - L_b$. This pattern is illustrated and the expression is plotted in Figure A-1 for various values of L and x . For values of L_{max} that are 10 dB or more higher than L_b , L_{eq} is approximated quite accurately by:

$$L_{eq} = L_{max} + 10 \log x \quad \text{(dB)} \quad (\text{Eq. A-5})$$

Except in extreme cases as noted on the graph. An hourly equivalent sound level (L_h) can be computed from the last equation with the integration time (T) equal to 3600 seconds (1 hour). An example of the relationship between L_h and L_{max} as a function of pulse

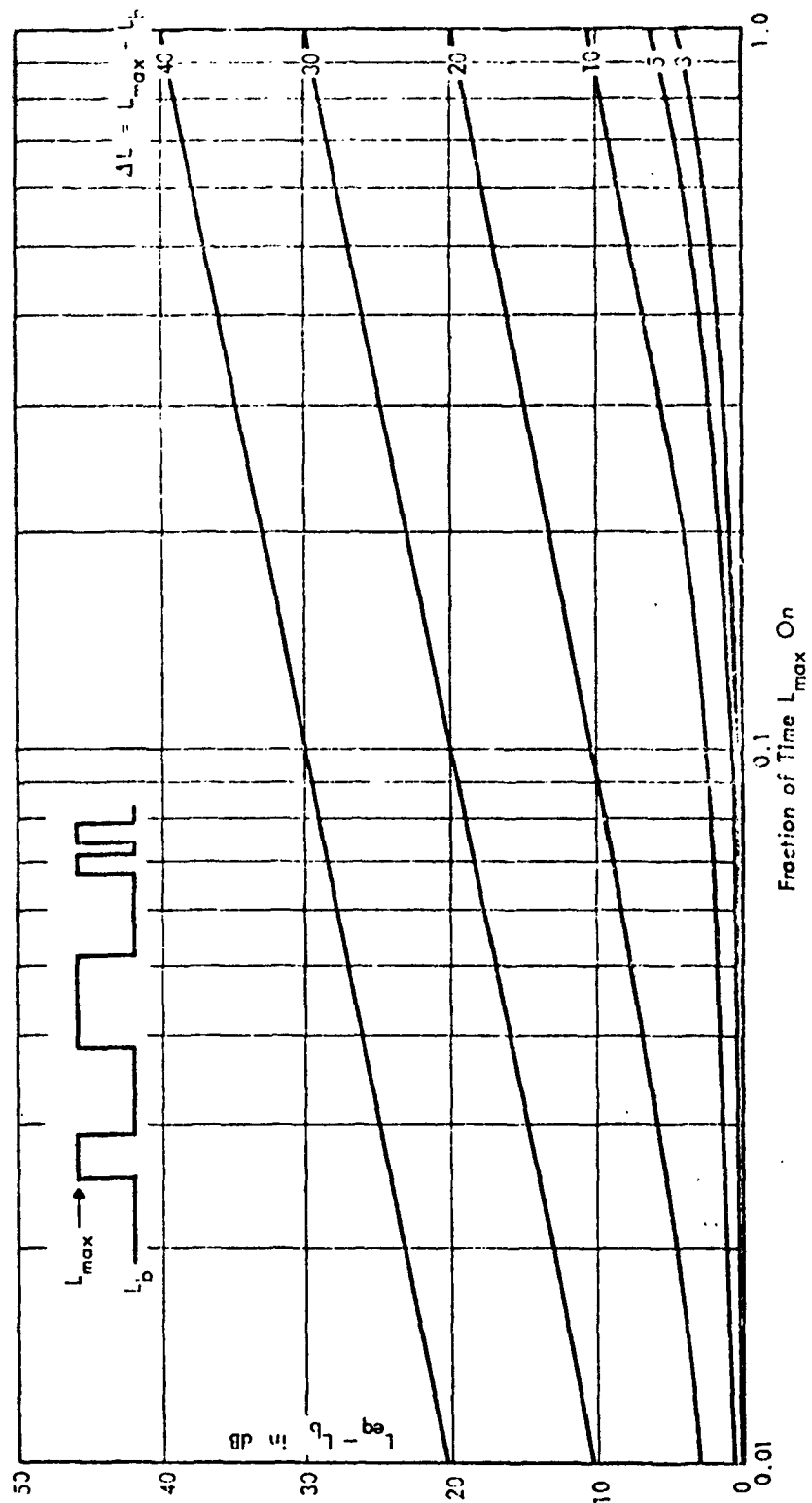


Figure A-1 L_{eq} for Intermittent L_{max} Added to L_b A-25

duration τ for $L_{\max} - L_b$ greater than 10 is given in Figure A-2.

These results may be described by:

$$L_h = L_{\max} + 10 \log \tau - 35.6 \quad (\text{dB}) \quad (\text{Eq. A-6})$$

$$\text{for } (L_{\max} - L_b) > 10$$

B. Triangular Time Patterns

The equivalent sound level for a single triangular time pattern having a maximum value of L_{\max} and rising from a background level of L_b is given by:

$$L_{eq} = L_b + 10 \log \left[\frac{10}{2.3 \Delta L} \left(10^{\frac{\Delta L}{10}} - 1 \right) \right] \quad (\text{dB}) \quad (\text{Eq. A-7})$$

where again $\Delta L = L_{\max} - L_b$. When ΔL is greater than 10 dB, the following approximation for L_{eq} is quite accurate:

$$L_{eq} = L_{\max} - 10 \log \frac{2.3 \Delta L}{10} \quad (\text{dB}) \quad (\text{Eq. A-8})$$

Except in extreme cases as noted on the graph. The value of L_{eq} for a series of n identical triangular time patterns having maximum levels of L_{\max} is given by:

$$L_{eq} = L_b + 10 \log \left[1 + \frac{n\tau}{T} \left(\frac{10}{2.3} \left(10^{\frac{\Delta L}{10}} - 1 \right) - \frac{\Delta L}{10} \right) \right] \quad (\text{dB}) \quad (\text{Eq. A-9})$$

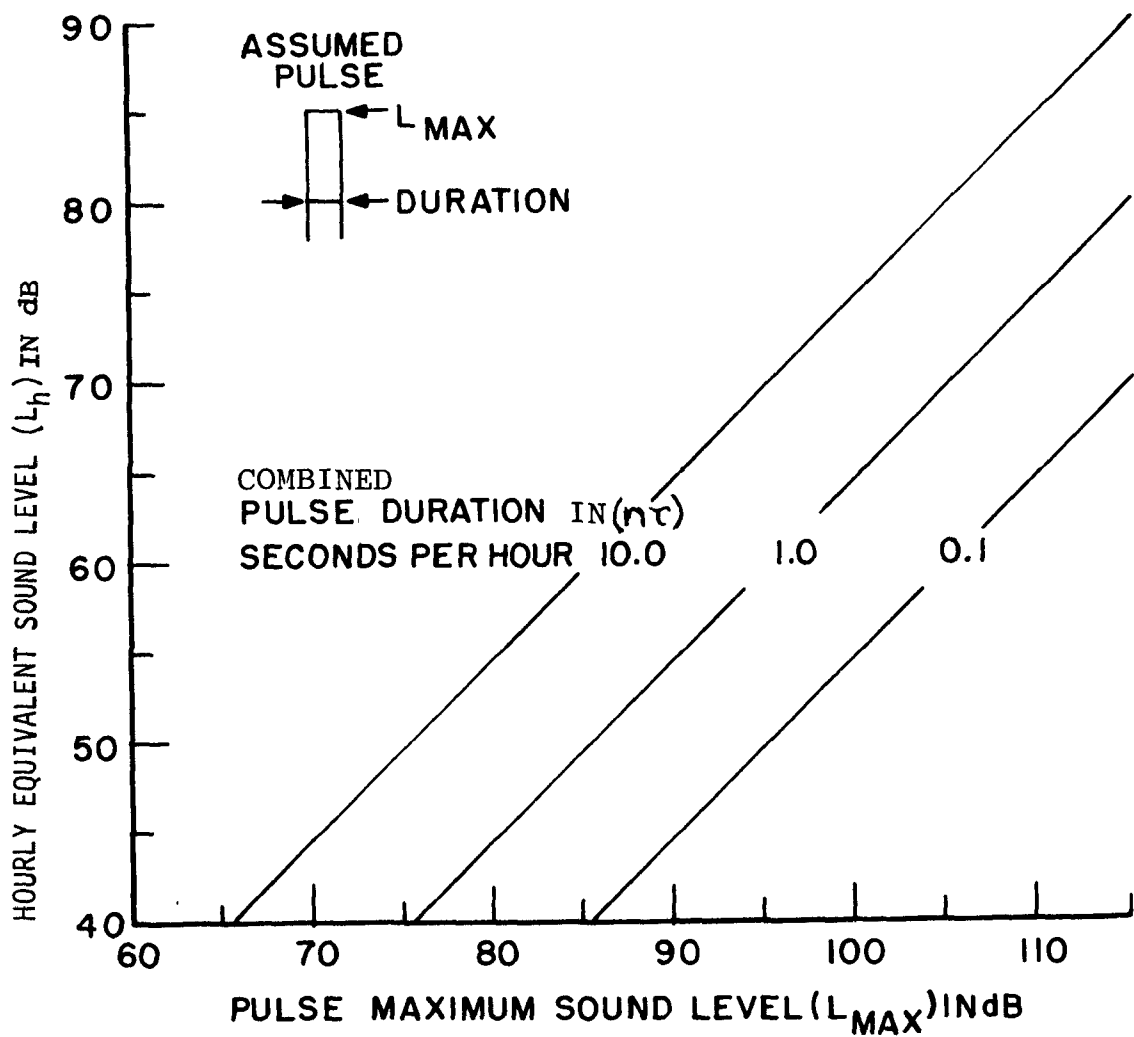


Figure A-2 Hourly Equivalent Sound Level as a Function of Pulse Duration and Maximum Sound Level for One Pulse per Hour or a Succession of n Shorter Pulses Having A Total of the Indicated Duration During One Hour. (Background sound level less than 30 dB)

(Derived from equation A-5)

Where the duration between ($L_{\max} - 10$ dB) points* is τ seconds, the background level is L_b , and the total time period is T . (See Fig. A-3)

A design chart for determining L_{eq} for different values of ΔL as a function of $n\tau$ per hour is provided in Figure A-3.

An approximation to equation (A-9) for cases where L is greater than 10 dB is given by:

$$L_{eq} = L_{\max} + 10 \log \frac{n\tau}{2.3T} \quad (\text{dB}) \quad (\text{Eq. A-10})$$

This equation yields fairly good results except in extreme cases as can be seen in the graph.

C. Trapezoidal Time Patterns

The equivalent sound level, L_{eq} , for a trapezoidal time pattern having maximum level of L_{\max} , background level L_b , duration between ($L_{\max} - 10$ dB) points of τ and duration at L_{\max} of ξ is given by

$$L_{eq} = 10 \log \left(\frac{1}{\frac{(\tau - \xi)\Delta L}{10} + \frac{\xi}{2}} \right) \left[10^{\frac{L_b}{10}} \left(\frac{(\tau - \xi)}{2.3} \right) \left(10^{\frac{\Delta L}{10}} - 1 \right) + 10^{\frac{L_{\max}}{10}} \left(\frac{\xi}{2} \right) \right] \quad (\text{dB}) \quad (\text{Eq. A-11})$$

The approximation to L_{eq} when ΔL is greater than 10 dB, for ξ small compared to τ , is:

$$L_{eq} = L_{\max} - \frac{2.3\Delta L}{10} + 10 \log \xi \quad (\text{dB}) \quad (\text{Eq. A-12})$$

This equation yields adequate results except in extreme cases as noted on the graph. Noting the similarity between equations (A-5) (A-8), and (A-12), one can approximate L_{eq} for

* The duration for which the noise level is within 10 dB of L_{\max} ; also called the "10 dB down" duration.

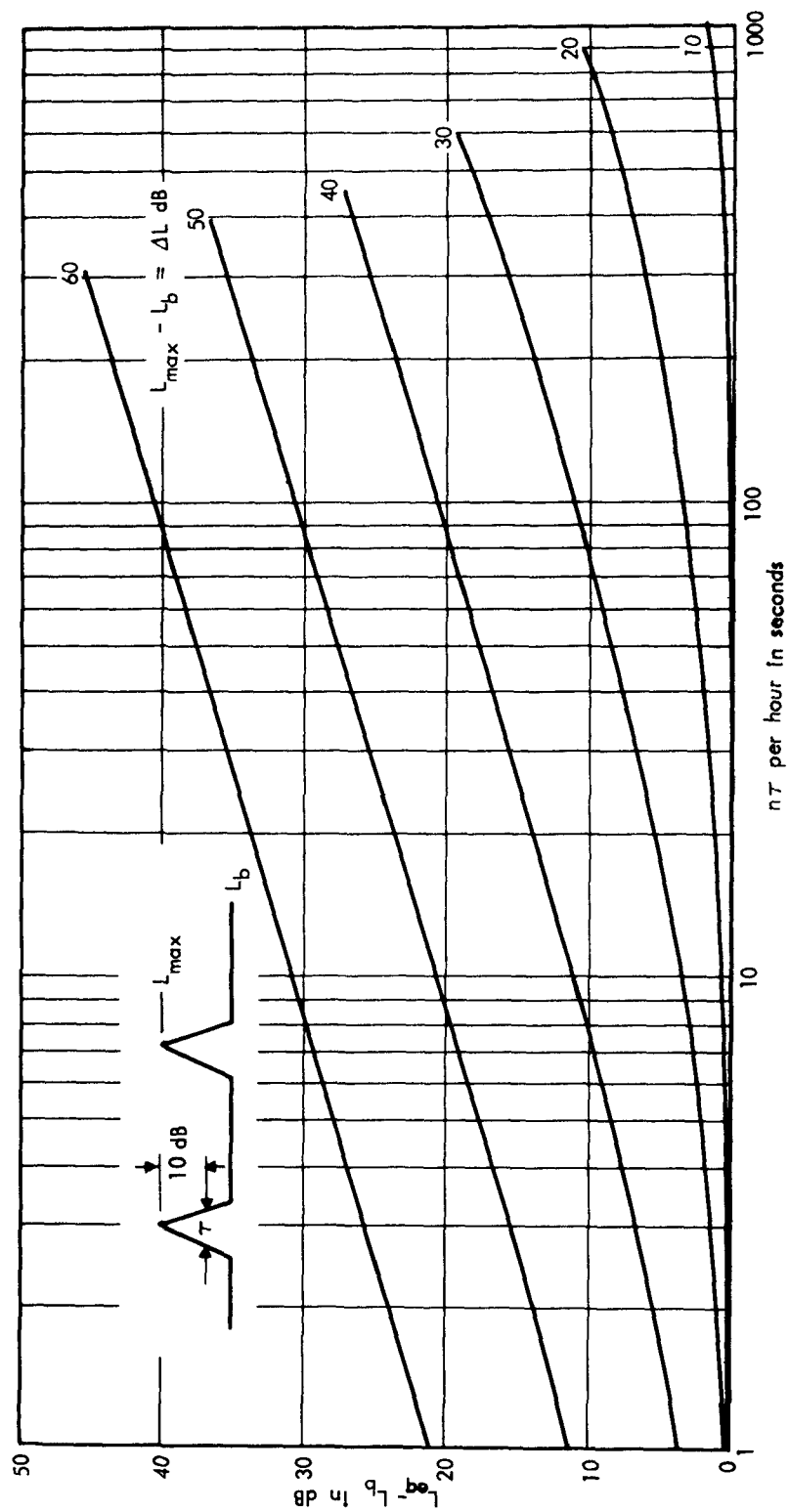


Figure A-3 L_{eq} for a Repeated Series of n Triangular Signals Overlaid on a Background Level of L_b dB and τ = Duration at $(L_{max} - 10)$ dB in Seconds
(REF: Task Group #3 Report and equation A-9)

a series of trapezoidal pulses by suitably combining design data from Figure A-1 and A-3. That is, the approximate L_{eq} for a series of n trapezoidal pulses is obtained by the L_{eq} value for triangular pulses plus an additional term equal to $10 \log n$, e.g.,

$$L_{eq} = L_{max} + 10 \log \frac{n\tau}{2.3T} + 10 \log n \xi \quad (\text{dB}) \quad (\text{Eq. A-13})$$

D. Time Patterns of Noise Having a Normal Statistical Distribution

Many cases of noise exposures in communities have a noise level distribution that may be closely approximated by a normal statistical distribution. The equivalent sound level for the distribution can be described simply in terms of its mean value, which for a normal distribution is L_{50} , and the standard deviation (s) of the noise level distribution:

$$L_{eq} = L_{50} + 0.115 s^2 \quad (\text{dB}) \quad (\text{Eq. A-14})$$

A design chart showing the difference between L_{eq} and L_{50} as a function of the standard deviation is provided in Figure A-4.

It is often of interest to know which percentile level of a normal distribution is equal in magnitude to the L_{eq} value for the distribution. A chart providing this relationship as a function of the standard deviation of the distribution is provided in Figure A-5.

Various noise criteria in use for highway noise are expressed in terms of the L_{10} value. For a normal distribution, the

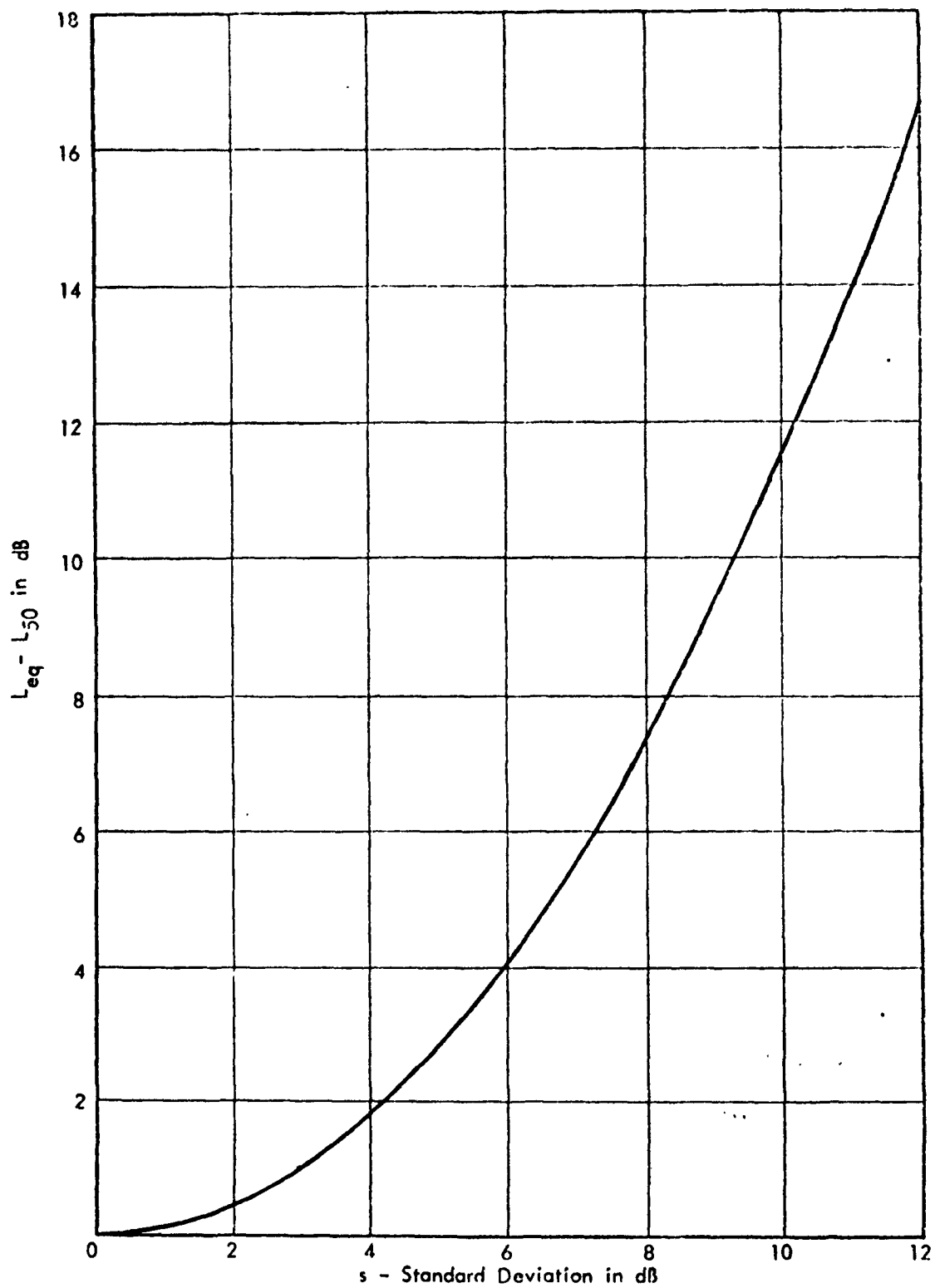


Figure A-4. Difference Between L_{eq} and L_{50} for a Normal Distribution Having Standard Deviation of s .

(REF: Task Group #3 Report and equation A-14)

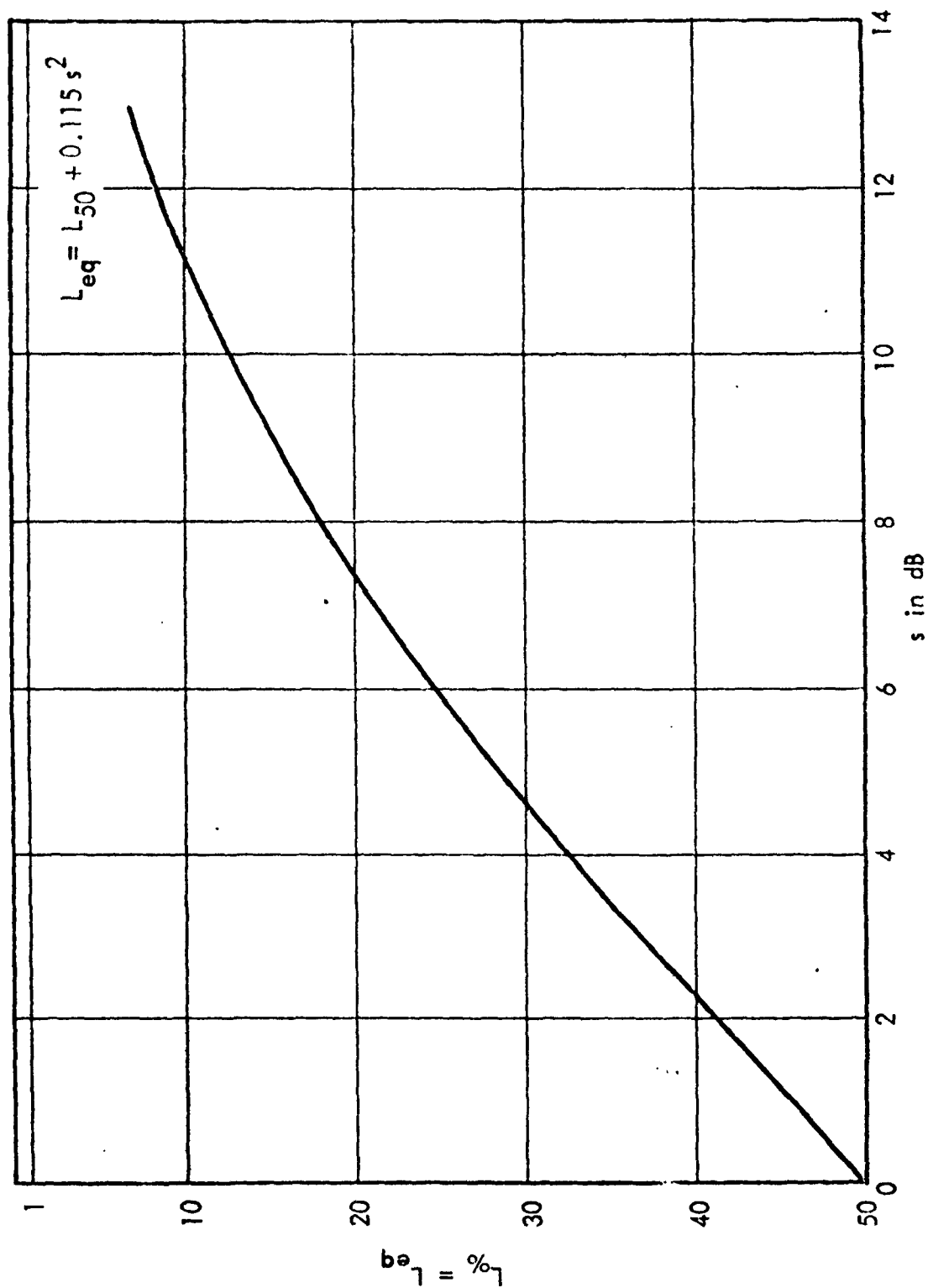
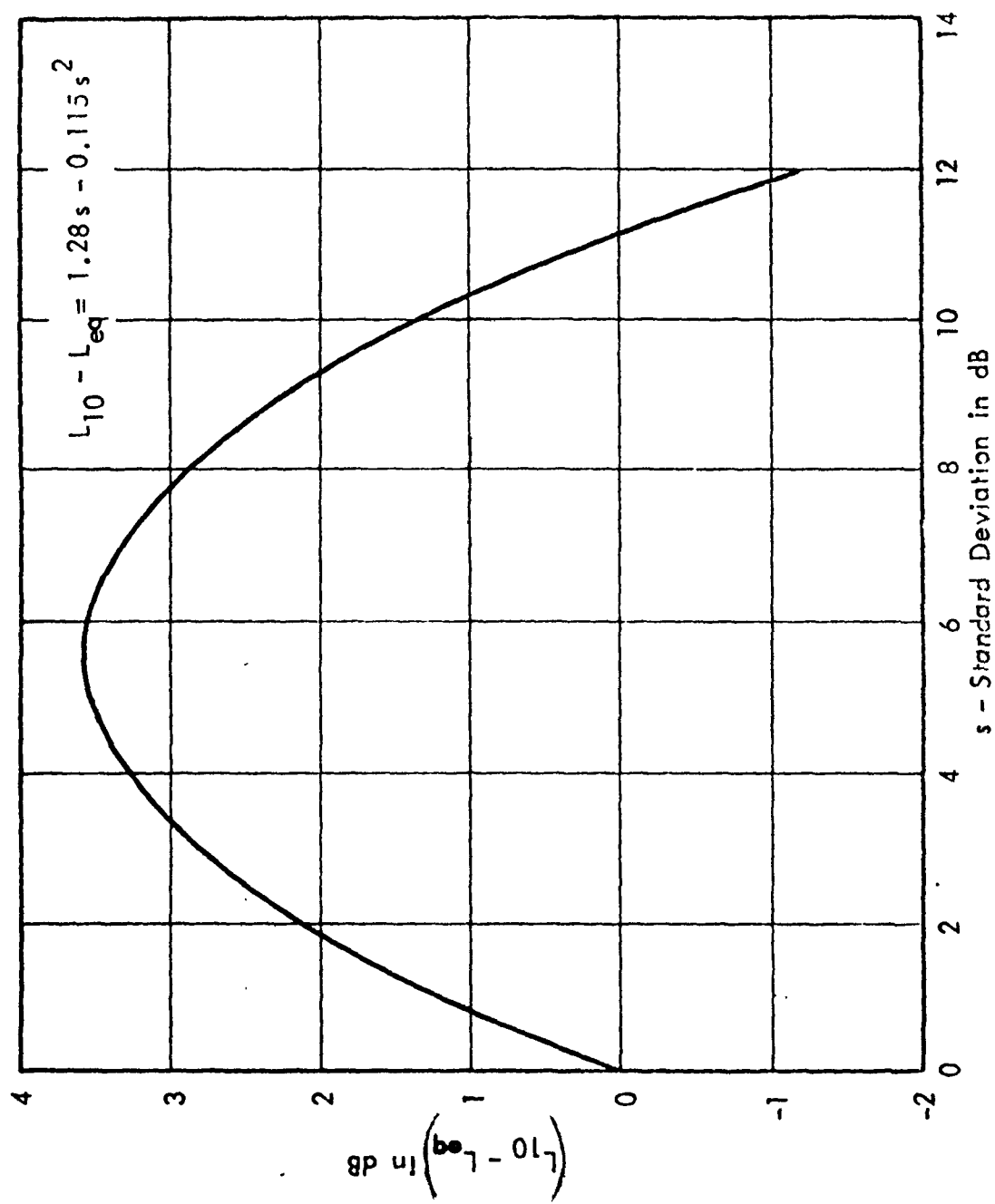


Figure A-5 Percentile of a Normal Distribution that is Equal to L_{eq}
 (REF: Task Group #3 Report; equation A-14 and probability function)



A-21

Figure A-6. Difference Between L_{10} and L_{eq} for a Normal Distribution
(REF: Task Group #3 Report)

L_{10} value is specified in terms of the median and standard deviation by the expression $L_{10} = L_{50} + 1.28 s$. The difference between L_{10} and L_{eq} is given by $L_{10} - L_{eq} = 1.28 s - 0.115 s$.² This expression is plotted as a function of s in Figure A-6.

It should be noted that traffic noise does not always yield a normal distribution of noise levels, so caution should be used in determining exact differences between L_{eq} and L_{10} .

III. Relationships Between Daytime and Nighttime Equivalent Sound Levels

The day-night sound level (L_{dn}) was defined as the equivalent A-weighted sound level during a 24-hour time period with a 10 decibel weighting applied to the equivalent sound level during the nighttime hours of 10 pm to 7 am. This may be expressed by the equation:

$$L_{dn} = 10 \log \frac{1}{24} \left[15(10^{L_d/10}) + 9(10^{\frac{L_n + 10}{10}}) \right] \quad (\text{dB}) \quad (\text{Eq. A-15})$$

where $L_d = L_{eq}$ for the daytime (0700-2200 hours)

and $L_n = L_{eq}$ for the nighttime (2200-0700 hours)

The effect of the weighting may perhaps be more clearly visualized if it is thought of as a method that makes all levels measured at night 10 dB higher than they actually are. Thus, as an example, if the noise level is a constant 70 dB all day and a constant 60 dB all night, L_{dn} would be 70 dB.

Methods for accounting for the differences in interference or

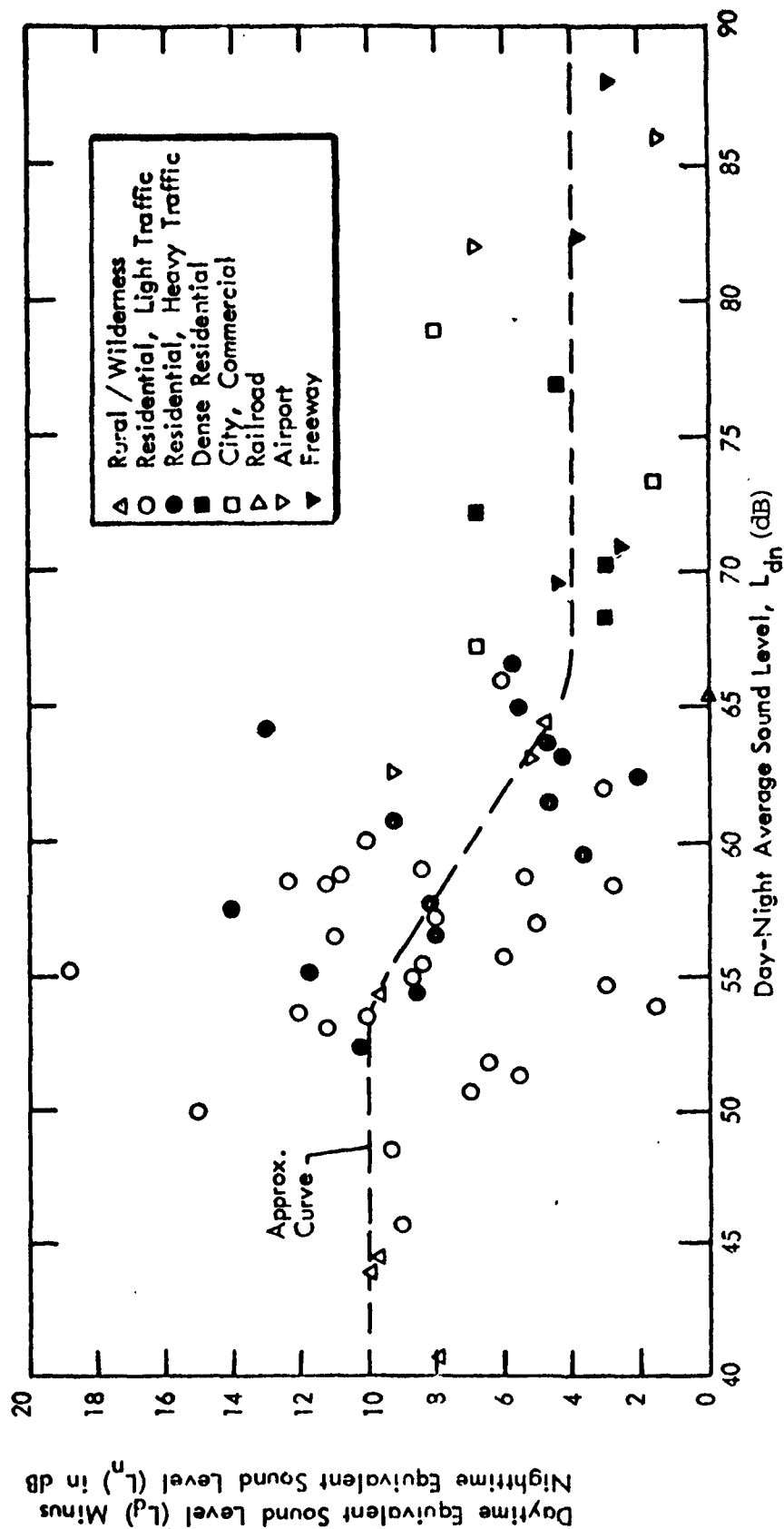


Figure A-7. Comparison of the Difference Between Day and Night Values of the Equivalent Sound Level with the Day-Night Average Sound Level, L_{dn}

(REF: Task Group #3 Report)

annoyance between daytime/nighttime exposures have been employed in
a number of different noise assessment methods around the world. ^{A-5}

The weightings applied to the nondaytime periods differ slightly
among the different countries but most of them weight night activities
on the order of 10 dB; ^{A-24} the evening weighting if used is 5 dB.
The choice of 10 dB for the nighttime weighting made in Section II
was predicated on its extensive prior usage, together with an examina-
tion of the diurnal variation in environmental noise. This variation
is best illustrated by comparing the difference between L_d and L_n as
a function of L_{dn} over the range of environmental noise situations.

Data from 63 sets of measurements were available in sufficient
detail that such a comparison could be made. These data are plotted
in Figure A-7. The data span noise environments ranging from the
quiet of a wilderness area to the noisiest of airport and highway
environments. It can be seen that, at the lowest levels (L_{dn} around
40-55 dB), L_d is the controlling element in determining L_{dn} , because
the nighttime noise level is so much lower than that in the daytime.
At higher L_{dn} levels (65-90 dB), the values of L_n are not much lower
than those for L_d ; thus, because of the 10 dB nighttime weighting, L_n
will control the value of L_{dn} .

The choice of the 10 dB nighttime weighting in the computation of
 L_{dn} has the following effect: In low noise level environments below
 L_{dn} of approximately 55 dB, the natural drop in L_n values is approxi-
mately 10 dB, so that L_d and L_n contribute about equally to L_{dn} . How-
ever, in high noise environments, the night noise levels drop relatively

little from their daytime values. In these environments, the nighttime weighting applies pressure towards a round-the-clock reduction in noise levels if the noise criteria are to be met.

The effect of a nighttime weighting can also be studied indirectly by examining the correlation between noise measure and observed community response in the 55 community reaction cases presented in the EPA report to Congress of 1971.^{A-1} The data have a standard deviation of 3.3 dB when a 10 dB nighttime penalty is applied, but the correlation worsens (std. dev. = 4.0 dB) when no nighttime penalty is applied. However, little difference was observed among values of the weighting ranging between 8 and 12 dB. Consequently, the community reaction data support a weighting of the order of 10 dB but they cannot be utilized for determining a finer gradation. Neither do the data support "three-period" in preference to "two-period" days in assigning non-daytime noise penalties.

IV. Comparison of Day-Night Sound Level With Other Measures of Noise Used by Federal Agencies

The following subsections compare the day-night sound level with three measures utilized for airport noise, CNR, NEF, and CNEL, the HUD Guideline Interim Standards and the Federal Highway Administration Standards:

- A. Comparison of L_{dn} With Composite Noise Rating (CNR), Noise Exposure Forecast (NEF), and Community Noise Equivalent Level (CNEL).

CNR, NEF, and CNEL are all currently used expressions for weighted, accumulated noise exposure. Each is intended to sum a series of noise while weighting the sound pressure level for frequency and then

adding appropriate nighttime weightings. The older ratings, CNR and NEF, are expressed in terms of maximum Perceived Noise Level and Effective Perceived Noise Level, respectively; each considers a day-night period identical to L_{dn} .

The measure CNEL itself is essentially the same as L_{dn} except for the method of treating nighttime noises. In CNEL, the 24-hour period is broken into three periods: day (0700-1900), evening (1900-2200), and night (2200-0700). Weightings of 5 dB are applied to the evening period and 10 dB to the night period. For most time distributions of aircraft noise around airports, the numerical difference between a two-period and three-period day are not significant, being of the order of several tenths of a decibel at most.

One additional difference between these four similar measures is the method of applying the nighttime weighting and the magnitude of the weighting. The original CNR concept, carried forward in the NEF, weighted the nighttime exposure by 10 dB. Because of the difference in total duration of the day and night periods, 15 and 9 hours respectively, a specific noise level at night receives a weighting of $10 + 10 \log \left(\frac{15}{9} \right)$, or approximately 12 dB in a reckoning of total exposure. Given the choice of weighting either exposure or level, it is simpler to weight level directly, particularly when actual noise monitoring is eventually considered.

The following paragraphs describe the method utilized to calculate CNR, NEF, and CNEL, as applied principally to aircraft sounds, together with the analogous method for calculating L_{dn} :

1. Composite Noise Rating Method (CNR)

The original method for evaluating land use around civil airports is the composite noise rating (CNR). It is still in wide use by the Federal Aviation Administration and the Department of Defense for evaluating land use around airfields (Civil Engineering Planning and Programming, "Land Use Planning with Respect to Aircraft Noise," AFM 86-5, TM 5-365, NAVDOCKS P-98, October 1, 1964). This noise exposure scale may be expressed as follows:

The single event noise level is expressed (without a duration or tone correction) as simply the maximum perceived noise level (PNL_{max}) in PNdB.

The noise exposure in a community is specified in terms of the composite noise rating (CNR), which can be expressed approximately as follows:

$$CNR = \overline{PNL}_{max} + 10 \log N_f - 12 \quad (Eq. A-16)$$

where

\overline{PNL}_{max} = approximate energy mean maximum perceived noise level (PNL) at a given point

$N_f = (N_d + 16.7 N_n)$, where N_d and N_n the numbers of daytime and nighttime events, respectively.

The constant (-12) is an arbitrary constant, and the factor 16.7 is used to weight the nighttime exposure in the 9-hour night period on a 10 to 1 basis with the daytime exposure in the 15-hour daytime period.

2. Noise Exposure Forecast (NEF)

This method, currently in wide use, for making noise exposure forecasts utilizes a perceived noise level scale with additional corrections for the presence of pure tones. Two time periods are used to weight the number of flights (Galloway, W.J. and Bishop, D.E., "Noise Exposure Forecasts: Evolution, Evaluation, Extensions and Land Use Interpretations," FAA-NO-70-9, August 1970).

The single event noise level is defined in terms of effective perceived noise level (EPNL) which can be specified approximately by:

$$EPNL = PNL_{\max} + \log \frac{\Delta t_{10}}{20} + F, \text{ (EPNdB)} \quad (\text{Eq. A-17})$$

where

PNL_{\max} = maximum perceived noise level during flyover, in PNdB,

Δt_{10} = "10 dB down" duration of the perceived noise level time history, in seconds,

and F = pure tone correction. Typically, $F = 0$ to $+3$ dB

Community noise exposure is then specified by the Noise Exposure Forecast (NEF). For a given runway and one or two dominant aircraft types, the total NEF for both daytime and nighttime operations can be expressed approximately as:

$$NEF = \overline{EPNL} + 10 \log N_f - 88.0 \quad (\text{Eq. A-18})$$

where

\overline{EPNL} = energy mean value of EPNL for each single event at the point in question

N_f = same as defined for CNR

3. Community Noise Equivalent Level (CNEL)

The following simplified expressions are derived from the exact definitions in the report, "Supporting Information for the Adopted Noise Regulations for California Airports." They can be used to estimate values of CNEL where one type of aircraft and one flight path dominate the noise exposure level.

Single event noise is specified by the single event noise exposure level (SENEL) in dB and can be closely approximated by:

$$\text{SENEL} = \text{NL}_{\text{max}} + 10 \log_{10} \tau/2 \quad (\text{dB}) \quad (\text{Eq. A-19})$$

where

NL_{max} = maximum noise level as observed on the A scale of a standard sound level meter

and

τ = duration measured between the points of $(L_{\text{max}} - 10)$ in seconds

The effective duration is equal to the "energy" of the integrated noise level (NL), divided by the maximum noise level, NL_{max} , when both are expressed in terms of antilogs. It is approximately 1/2 of the 10 dB down duration.

A measure of the average integrated noise level over one hour is also utilized in the proposed standard. This is the hourly

noise level (in dB), defined as:

$$\text{HNL} = \overline{\text{SENEL}} + 10 \log n - 35.6 \quad (\text{dB}) \quad (\text{Eq. A-20})$$

where

$\overline{\text{SENEL}}$ = energy mean value of SENEL for each single event,

and

n = number of flights per hour

The total noise exposure for a day is specified by the community noise equivalent level (CNEL) in dB, and may be expressed as:

$$\text{CNEL} = \overline{\text{SENEL}} + 10 \log N_c - 49.4 \quad (\text{dB}) \quad (\text{Eq. A-21})$$

where

$$N_c = (N_d + 3N_e + 10N_n)$$

$$\text{or} \quad = (12\bar{n}_d + 9\bar{n}_e + 90\bar{n}_n)$$

N_d, \bar{n}_d = total number and average number per hour, respectively, of flights during the period 0700 to 1900

N_e, \bar{n}_e = total number and average number per hour, respectively, of flights during the period 1900 to 2200

and

N_n, \bar{n}_n = total number and average number per hour, respectively, of flights during the period 2200 to 0700

4. Day-Night Sound Level (L_{dn})

The following simplified expressions are useful for estimating the value of L_{dn} for a series of single event noises which are of sufficient magnitude relative to the background noise that

they control L_{dn} :

Single event noise is specified by the sound exposure level (L_{ex}) measured during a single event. It can be closely approximated by:

$$L_{ex} \approx L_{max} + 10 \log_{10} \tau/2 \quad (\text{dB}) \quad (\text{Eq. A-22})$$

where

L_{max} = maximum sound level as observed on the A scale of a standard sound level meter on the slow time characteristic

and τ = duration measured between the points of ($L_{max}-10$) in seconds

The day-night sound level may be estimated by:

$$L_{dn} = \overline{L_{ex}} + 10 \log N - 49.4 \quad (\text{dB}) \quad (\text{Eq. A-23})$$

where

$\overline{L_{ex}}$ = the energy mean value of the single event L_{ex} values

$$N = (N_d + 10N_n)$$

or

N_d = total number of events during the period 0700 to 2200

and

N_n = total number of events during the period 2200 to 0700

There is no fixed relationship between L_{dn} or CNEL and CNR or NEF because of the differences between the A-level and PNL frequency weightings and the allowance for duration, as well as the minor differences in approach to day-night considerations. Nevertheless, one may translate from one measure to another by the following approximate relationship:

$$L_{dn} \doteq CNEL \doteq NEF + 35 \doteq CNR - 35 \quad (\text{Eq. A-24})$$

For most circumstances involving aircraft flyover noise, these relationships are valid within about a ± 3 dB tolerance.

B. Comparison of L_{eq} with HUD Guideline Interim Standards
(1390.2 Chg. 1)

The interim HUD standards for outdoor noise are specified for all noise sources, other than aircraft, in terms of A-weighted sound level not to be exceeded more than a certain fraction of the day. Aircraft noise criteria are stated in terms of NEF or CNR.

The HUD exposure criteria for residences near airports are "normally acceptable" if NEF 30 or CNR 100 is not exceeded. A "discretionary acceptable" category permits exposures up to NEF 40 or CNR 115.

For all other noise sources, the HUD criteria specify a series of acceptable, discretionary, and unacceptable exposures. Since these specifications are similar to points on a cumulative statistical description of noise levels, it is of interest to compare the HUD

criteria with L_{eq} for different situations. For discussion purposes, consider the boundary between the categories "discretionary-normally acceptable" and "unacceptable."

The first criterion defining this boundary allows A-weighted noise levels to exceed 65 dB up to 8 hours per 24 hours, while the second criterion states that noise levels exceeding 80 dB should not exceed 60 minutes per 24 hours. These two values may be used to specify two limit points on a cumulative distribution function,

$L_{33.3} = 65$ dB and $L_{4.2} = 80$ dB. The relationship between L_{eq} and the HUD criteria may then be examined for different types of distribution functions, restricting the shape of the distribution only so that it does not exceed these two limit points.

First consider two cases of a normal distribution of noise levels, comparable to vehicle traffic noise. For the first case, assume a distribution with quite narrow variance so placed on the graph that the 65 dB point is not exceeded (see Fig. A-8). For this curve, to the nearest decibel, $L_{50} = 64$ dB, and the corresponding standard deviation (arbitrarily chosen small) is 2.3 dB. The resulting L_{eq} is equal to 64.6 dB.

Now consider a normal distribution with the widest permissible variance (the curve marked Maximum Variance in Figure A-8); if the variance were any greater, the distribution would violate HUD's requirement that the level not exceed 80 dB for more than 60 minutes per 24 hours. This distribution, to the nearest decibel, has

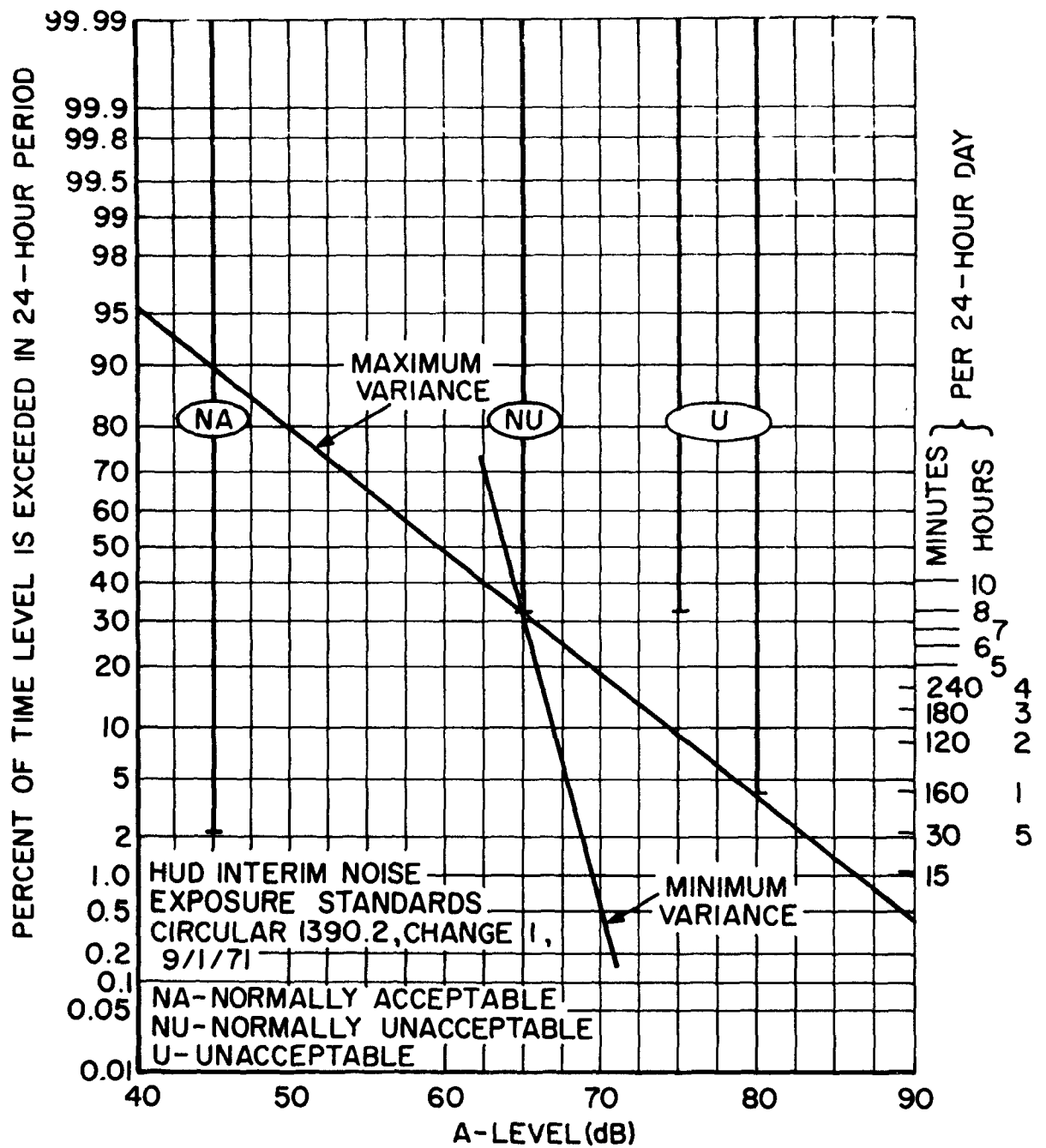


Figure A-8 Permissible Normal Distributions of L_{eq} Under HUD Standards

(REF: Task Group #3 Report)

$L_{50} = 60$ dB, $L_{10} = 74$ dB and a standard deviation of approximately 11 dB. The resultant $L_{eq} = 74$ dB, is almost 10 dB higher than for the previous case. Both curves meet HUD's interim standards.

Next, consider a series of intermittent high level noises, superposed on a typical urban/suburban background noise level, such that 80 dB is not exceeded more than 60 minutes per 24 hours, say 4%. Choosing a series of repeated triangular-shaped time signals of 90 dB maximum sound level will produce an L_{eq} value of 72.4 dB without exceeding an L_4 value of 80 dB.

However, one can allow the maximum level to increase indefinitely provided L_4 remains at 80 dB or less. The limiting case is that of a square-shaped time pattern, switched on and off. In this instance, if the total "on-time" is 4% or less, the value of L_{eq} is equal to $L_{max} - 14$ dB, and both L_{max} and L_{eq} can increase without limit and still remain acceptable within the HUD interim standards. Maximum A-levels for an aircraft can be as high as 110 dB, which would permit L_{eq} values of 96 to be obtained without exceeding the L_4 limit of 80 dB.

It is clear that no unique relationship can be specified between the HUD non-airport standards and L_{eq} . Values of L_{eq} ranging up to 95 dB can be found in compliance with the HUD outdoor noise standard depending on the time distribution of noise levels considered. Even if the nighttime penalty were applied to L_{eq} to yield L_{dn} there would still be no unique relation with the HUD standards.

C. Comparison of L_{eq} With Federal Highway Administration Noise Standards, PPM 90-2, February 8, 1973.

The primary criteria of PPM 90-2 are that L_{10} for noise levels inside people-occupied spaces shall not exceed 55 dB, or for sensitive outdoor spaces"--in which serenity and quiet are of extraordinary significance--," 60 dB.

Highway noise often has a random distribution of noise level, the distribution function being approximately normal in many instances. In this case, the relationship between L_{eq} and L_{10} is given by the expression:

$$L_{eq} = L_{10} - 1.28 s + 0.115 s^2 \quad (\text{dB}) \quad (\text{Eq. A-25})$$

where s is the standard deviation of the noise level distribution. The difference between L_{10} and L_{eq} for normal distribution of sound level is plotted in Figure A-6. It can be noted that $L_{eq} = L_{10} - 2$ dB within ± 2 dB, for s ranging from 0 to 11 dB. Highway noise rarely has a standard deviation of 11 dB; 2 to 5 dB is more typical.

Thus, setting L_{10} at 60 dB for highway noise impacting a sensitive outdoor space, we find that an L_{eq} value of $60 - 2 = 58 \pm 2$ dB would meet the most sensitive FHWA criterion.

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APPENDIX B

LEVELS OF ENVIRONMENTAL NOISE IN THE U.S. AND TYPICAL EXPOSURE PATTERNS OF INDIVIDUALS

Levels of environmental noise for various defined areas are provided for both the outdoor and indoor situation. Examples are then used to illustrate how an individual's daily dose accumulates from the exposure to such noise levels.

I. Levels of Environmental Noise

A. Outdoor Sound Levels

The range of day-night sound levels (L_{dn}) in the United States is very large, extending from the region of 20-30 dB estimated for a quiet* wilderness area to the region of 80-90 dB in the most noisy urban areas, and to still higher values within the property boundaries of some governmental, industrial and commercial areas which are not accessible to the general public. The measured range of values of day/night sound levels outside dwelling units extends from 44 dB on a farm to 88.8 dB outside an apartment located adjacent to a freeway. Some examples of these data are summarized in Figure B-1.

The dominant sources for outdoor noise in urban residential areas are motor vehicles, aircraft and voices. This conclusion has been found in several studies, including a recent survey ^{B-1} of 1200 people which is summarized in Table B-1.

*Measurement approximately 25 feet from a mountain waterfall on a small canyon stream in Wyoming gave an L_{dn} of approximately 85 dB. ^{B-2}

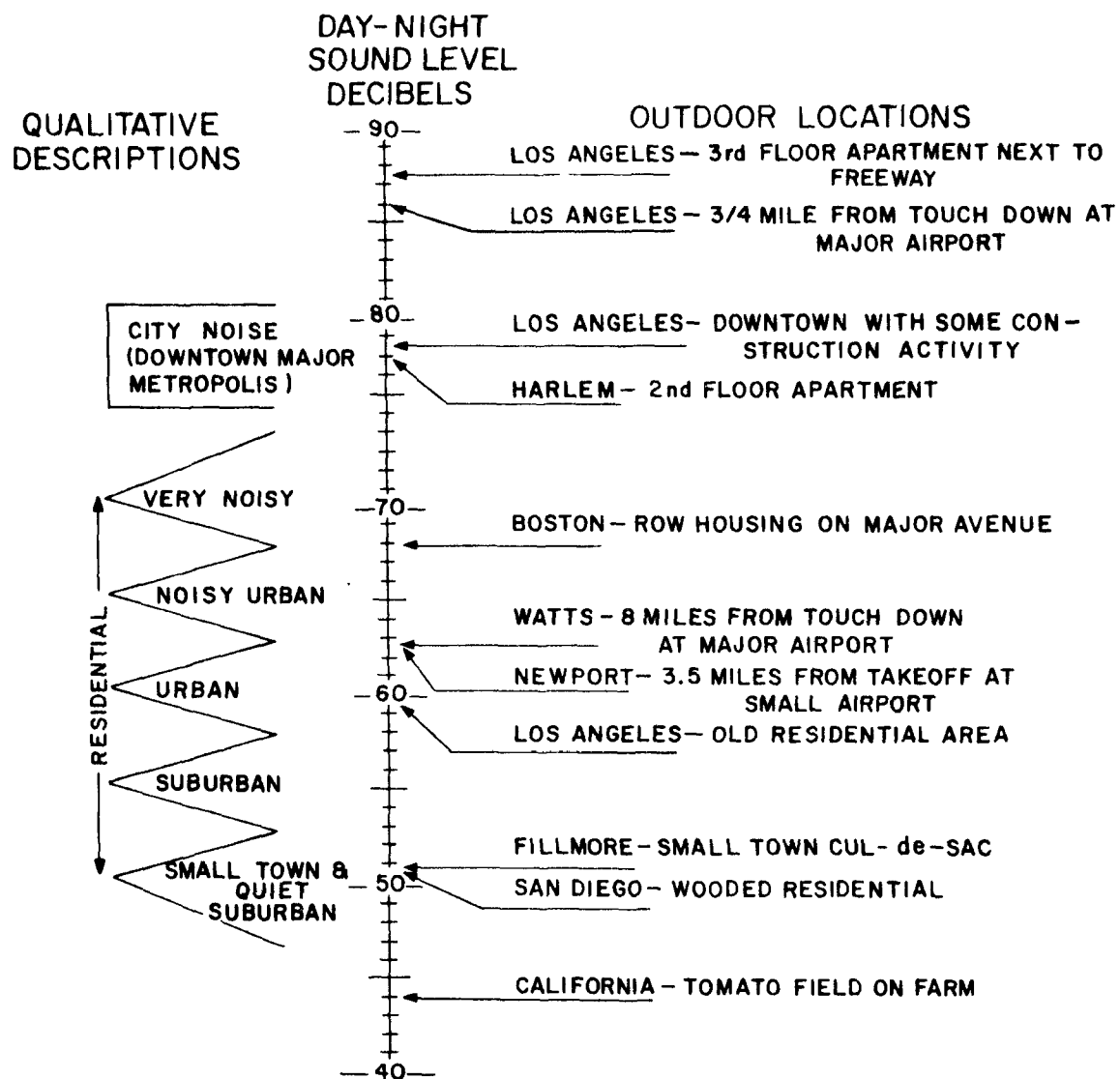


Figure B-1. Examples of Outdoor Day-Night Sound Level in dB (re 20 micropascals) Measured at Various Locations B-4

TABLE B-1

PERCENT CONTRIBUTION OF EACH SOURCE IDENTIFIED BY
RESPONDENTS CLASSIFYING THEIR NEIGHBORHOOD AS NOISY
(72% OF 1200 RESPONDENTS) B-3

<u>Source</u>	<u>Percentage</u>
Motor Vehicles	55
Aircraft	15
Voices	12
Radio and TV Sets	2
Home Maintenance Equipment	2
Construction	1
Industrial	1
Other Noises	6
Not Ascertained	8

The cumulative number of people estimated to reside in areas where the day-night sound level exceeds various values is given in Table B-2. In the areas where the L_{dn} exceeds 60 dB, the proportion between the number of people residing in areas where the outdoor noise environment is dominated by aircraft and those residing in areas where motor vehicles dominate is approximately one to four. This proportion is almost identical to the proportion found in the survey, previously summarized in Table B-1 where people were asked to judge the principle contributing sources of neighborhood noise. The estimates in Table B-2 of the number of people living in areas which are exposed to freeway and aircraft noise are taken from the EPA airport/aircraft Noise report ^{B-4}. They were based on calculated noise contours and associated populations for a few selected situations which formed the basis for extrapolation to national values. The estimates for the number of people living in areas in which the noise environment is dominated by urban traffic were developed from a survey ^{B-5} conducted in Summer 1973 for EPA. The survey measured the outdoor 24-hour noise environment at 100 sites located in 14 cities, including at least one city in each of the ten EPA regions. These data, supplemented with that from previous measurements at 30 additional sites, were correlated with census tract population density to obtain a general relationship between L_{dn} and population density. This relationship was then utilized, together with census data giving population in urban areas as

TABLE B-2

ESTIMATED CUMULATIVE NUMBER OF PEOPLE IN MILLIONS IN
THE UNITED STATES RESIDING IN URBAN AREAS WHICH ARE EXPOSED
TO VARIOUS LEVELS OF OUTDOOR DAY/NIGHT AVERAGE SOUND
LEVEL, B-4 and B-5

Outdoor L _{dn} Exceeds	Urban Traffic	Freeway Traffic	Aircraft Operations	Total
60	59.0	3.1	16.0	78.1
65	24.3	2.5	7.5	34.3
70	6.9	1.9	3.4	12.2
75	1.3	0.9	1.5	3.7
80	0.1	0.3	0.2	0.6

a function of population density, to derive the national estimate given in Table B-2.

These data on urban noise enable an estimate of the percentage urban population in terms of both noise levels and the qualitative descriptions of urban residential areas which were utilized in the Title IV EPA report to Congress in 1974 B-

These estimates, summarized in Table B-3, show that the majority of the 134 million people residing in urban areas have outdoor L_{dn} values ranging from 43 dB to 72 dB with a median value of 59 dB. The majority of the remainder of the population residing in rural or other non-urban areas is estimated to have outdoor L_{dn} values ranging between 35 and 50 dB.

B. Indoor Sound Levels

The majority of the existing data regarding levels of environmental noise in residential areas has been obtained outdoors. Such data are useful in characterizing the neighborhood noise environment evaluating the noise of identifiable sources and relating the measured values with those calculated for planning purposes. For these purposes, the outdoor noise levels have proved more useful than indoor noise levels because the indoor noise levels contain the additional variability of individual building sound level reduction. This variability among dwelling units results from type of construction, interior furnishings, orientation of rooms relative to the noise, and the manner in which the dwelling unit is ventilated.

TABLE B-3

ESTIMATED PERCENTAGE OF URBAN POPULATION (134 MILLION)
RESIDING IN AREAS WITH VARIOUS DAY/NIGHT NOISE LEVELS TOGETHER
WITH CUSTOMARY QUALITATIVE DESCRIPTION
OF THE AREA (B-3 & B-4)

Description	Typical Range L _{dn} in dB	Average L _{dn} in dB	Estimated Percentage of Urban Population	Average Census Tract Population Density, Number of People Per Square Mile
Quiet Suburban Residential	48-52	50	12	630
Normal Suburban Residential	53-57	55	21	2,000
Urban Residential	58-62	60	28	6,300
Noisy Urban Residential	63-67	65	19	20,000
Very Noisy Urban Residential	68-72	70	7	63,000

Data on the reduction of aircraft noise afforded by a range of residential structures are available ^{B-7}. These data indicate that houses can be approximately categorized into "warm climate" and "cold climate" types. Additionally, data are available for typical open-window and closed-window conditions. These data indicate that the sound level reduction provided by buildings within a given community has a wide range due to differences in the use of materials, building techniques, and individual building plans. Nevertheless, for planning purposes, the typical reduction in sound level from outside to inside a house can be summarized as follows in Table B-4. The approximate national average "window open" condition corresponds to an opening of 2 square feet and a room absorption of 300 sabins (typical average of bedrooms and living rooms). This window open condition has been assumed throughout this report in estimating conservative values of the sound levels inside dwelling units which results from outdoor noise.

The sound levels inside dwelling units result from the noise from the outside environment plus the noise generated internally. The internally generated noise results from people activity, appliances and heating and ventilating equipment. Twenty-four hour continuous measurements were made in 12 living rooms (living, family or dining room) in 12 houses during the 100-site EPA survey ^{B-5} of urban noise, excluding areas where the noise resulted from freeways and aircraft. The results, summarized below in Table B-5, show that the inside day-night

TABLE B -4

SOUND LEVEL REDUCTION DUE TO HOUSES* IN WARM AND
COLD CLIMATES, WITH WINDOWS OPEN AND CLOSED ^{B-7}

	<u>Windows Open</u>	<u>Windows Closed</u>
Warm climate	12 dB	24 dB
Cold climate	17 dB	27 dB
Approx. national average	15 dB	25 dB

* (Attenuation of outdoor noise by exterior shell of the house)

TABLE B-5

COMPARISON OF INTERNAL AND OUTDOOR SOUND LEVELS IN
LIVING AREAS AT 12 HOMES B-7

	Daytime Sound Level (L_d) in dB	Nighttime Sound Level (L_n) in dB	Day/Night Sound Level L_{dn} in dB
Outdoors:			
Average	57.7	49.8	58.8
Standard Deviation	3.1	4.6	3.6
Indoors:			
Average	59.4	46.9	60.4
Standard Deviation	5.6	8.7	5.9
Difference (Outdoors minus Indoors)	1.7	2.9	- 1.6

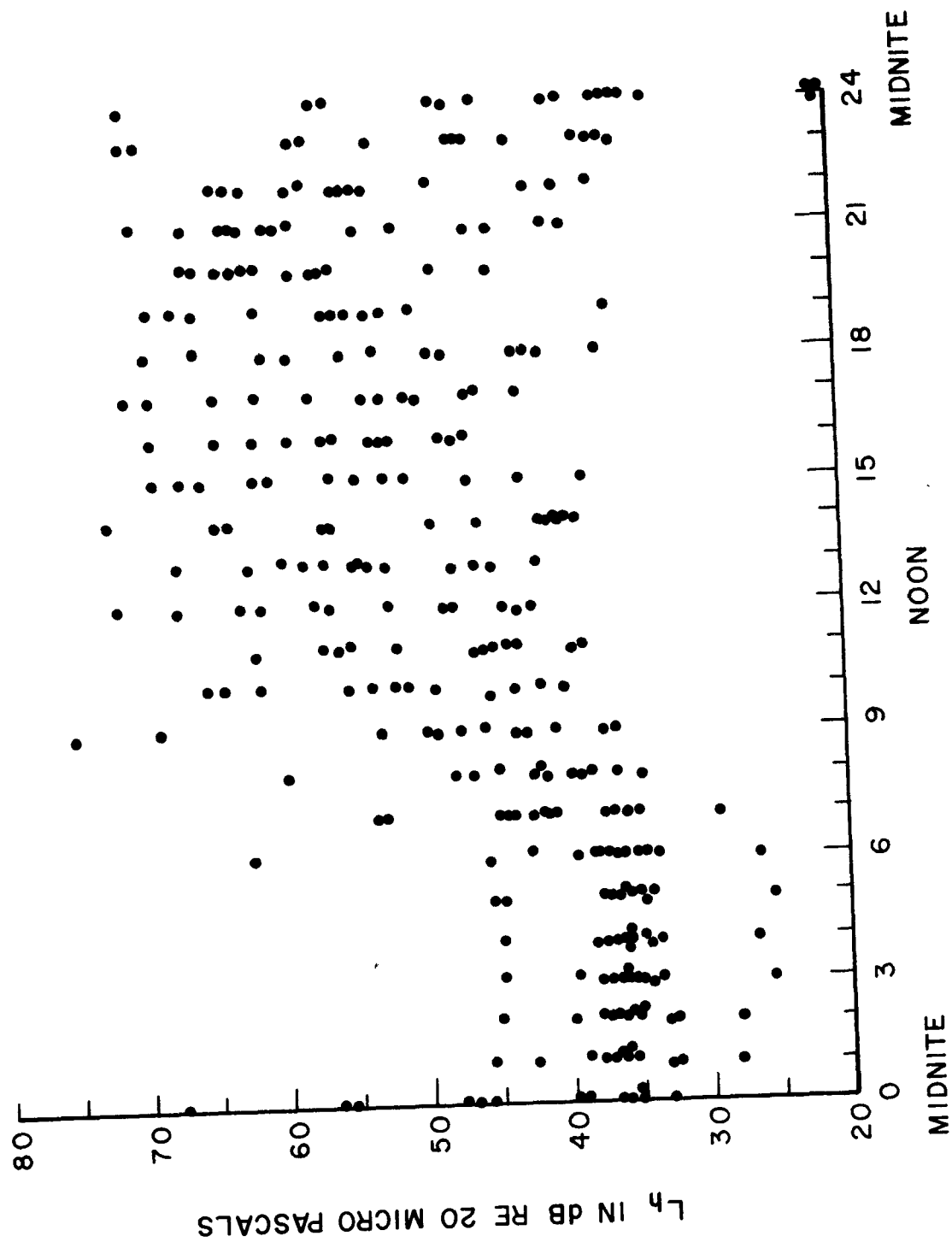


Figure B-2. Noise Inside Living Areas of 12 Homes - Values of Hourly Equivalent Sound Level as a Function of Hour of Day B-5

sound level in these homes was the result of internally generated noise. In fact, the internal L_{dn} and L_d values were slightly higher than those measured outdoors, despite the fact that the average house sound level reduction appeared to exceed 18 dB. The pattern for the indoor sound levels varies significantly among the homes, as portrayed by the data in Figure B-2. The hourly equivalent sound levels have an average minimum of approximately 36 dB during the hours between 1 a.m. and 6 a.m. This minimum level is probably governed by outdoor noise in the majority of the situations. However, when people are active in the daytime, the hourly equivalent sound levels have a range of over 30 dB, depending on the type of activity. Thus, during the waking hours, the outdoor noise sets a lower bound of indoor noise. For the outdoor L_{dn} range of 52-65 dB this lower bound is significantly below the average level of the internally generated noise.

II. Examples of Individual Noise Exposures

The noise exposures received by individuals are very much a function of the individual's life style. The variation in these exposures can be illustrated by examining several typical daily activity patterns. While these patterns are realistic, they should not be construed as applying to all individuals following the particular life style depicted.

The total daily exposure, $L_{eq}(24)$ is considered the sum of the sound energy from all daily exposure, including occupational exposures. Mathematically this can be interpreted as:

$$L_{eq}(24 \text{ hr}) = 10 \log \left[\sum_{i=1}^n t_i \times 10^{L(t_i)/10} \right] - 49.4$$

where: $L(t_i)$ is the L_{eq} value for the appropriate time periods, (t_i) and the summation of all the t_i 's must equal a total of 24 hours (i.e., $\sum_{i=1}^n t_i = 24 \text{ hours (86400 sec.)}$).

Five different exposure patterns for a 24-hour day are depicted in Figures B-3 to B-7. The patterns are representative of the exposures that might be incurred by:

Factory worker	-	Figure B-3
Office worker	-	Figure B-4
Housewife	-	Figure B-5
School child	-	Figure B-6
Pre-school child	-	Figure B-7

Certain assumptions were made in determining the levels shown in Figure B-3 to B-7. First, it was assumed that the suburban environment was equal to an L_{dn} of 50 ($L_d = 50$, $L_n = 40$). For the urban environment, the L_{dn} value was 75 ($L_d = 72$, $L_n = 68$). The levels for the various activities were determined from previous EPA reports on appliance noise, transportation noise, as well as information contained in the EPA Task Group #3 Report relating to aircraft noise. B-4

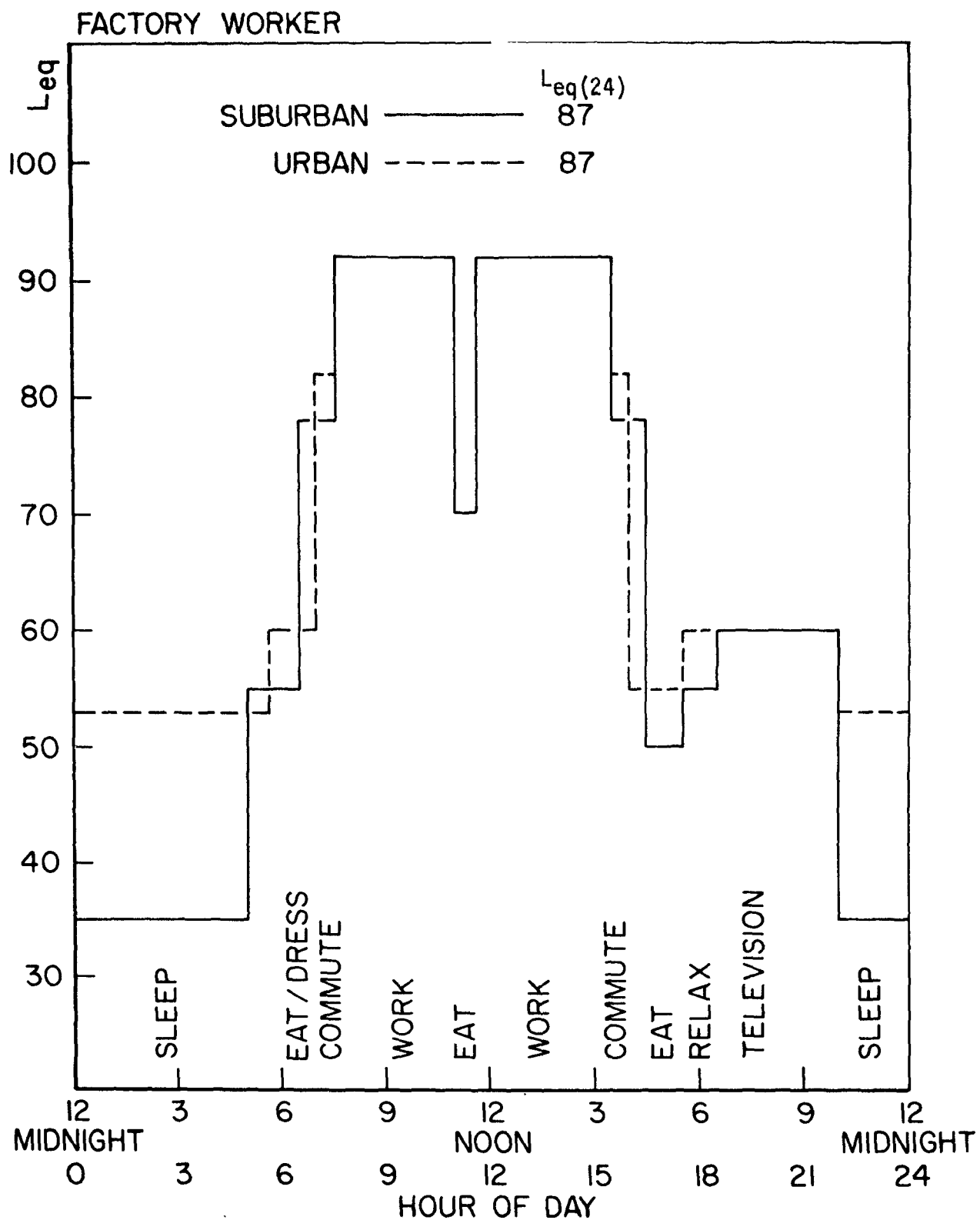


Figure B-3. Typical Noise Exposure Pattern of a Factory Worker
B-1, B-4, B-8, B-9

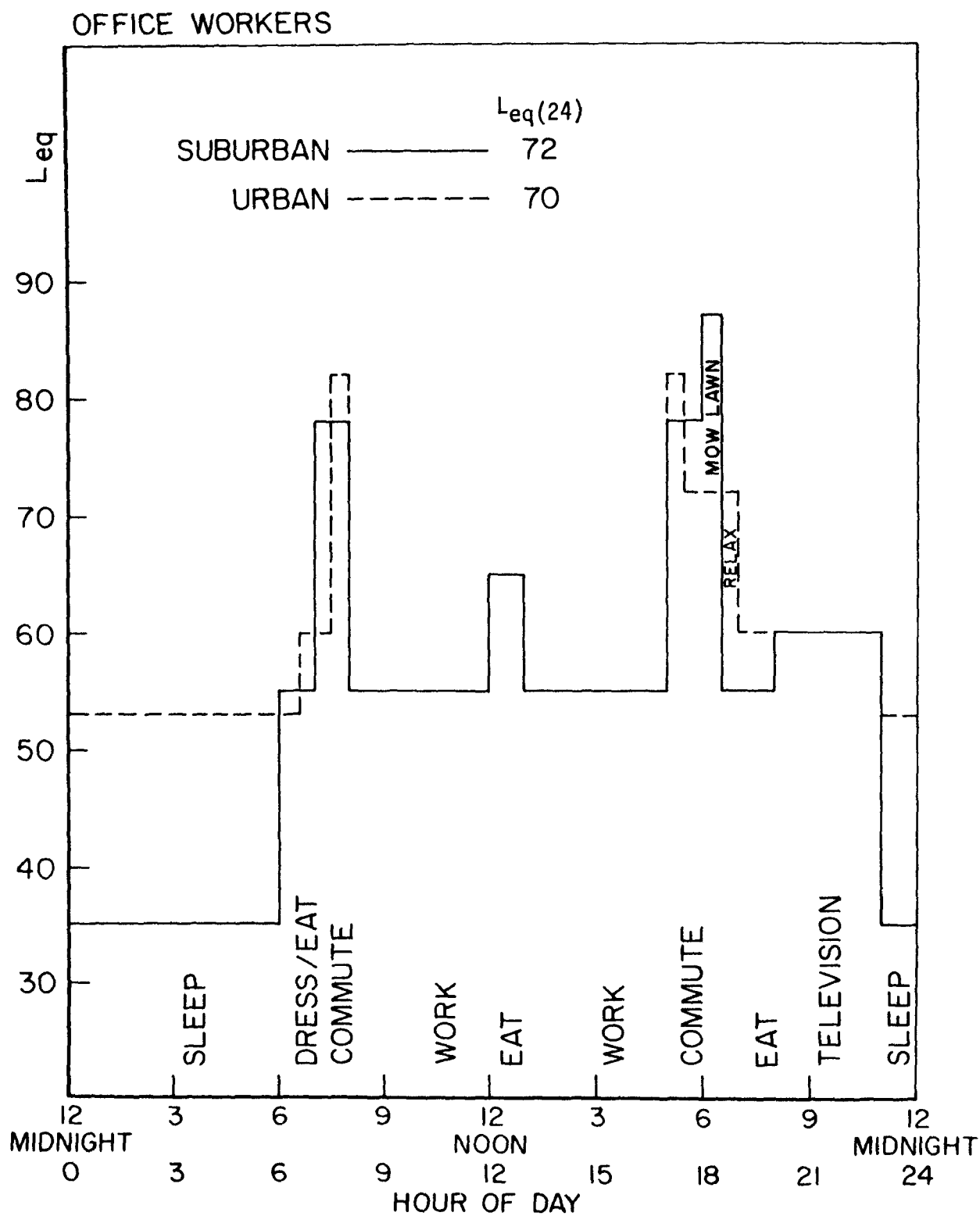


Figure B-4. Typical Noise Exposure Pattern of an Office Worker
B-1, B-4, B-8, B-9

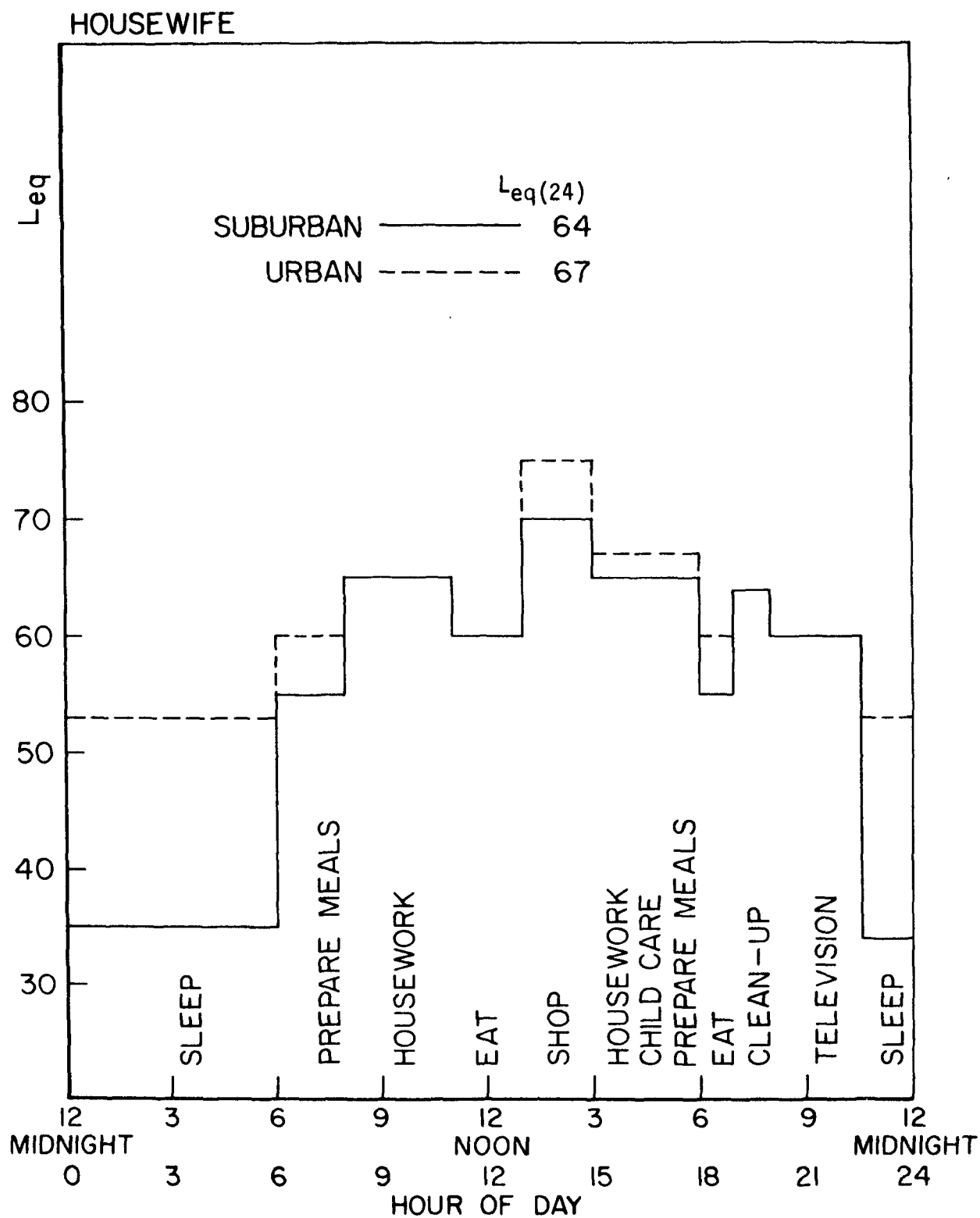


Figure B-5. Typical Noise Exposure Pattern of a Housewife
B-1, B-4, B-8, B-9

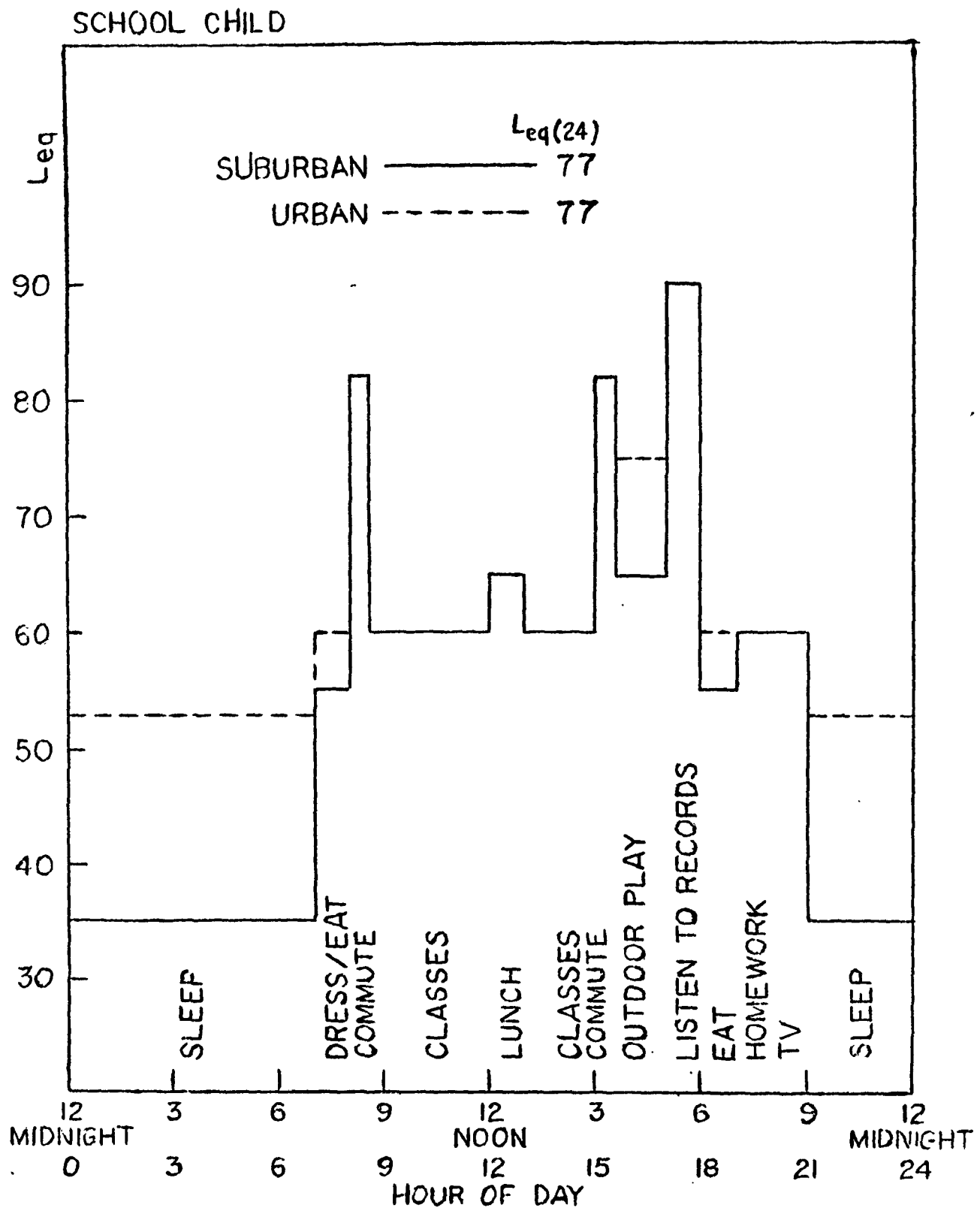


Figure B-6. Typical Noise Exposure Pattern of a School Child
B-1, B-4, B-8, B-9

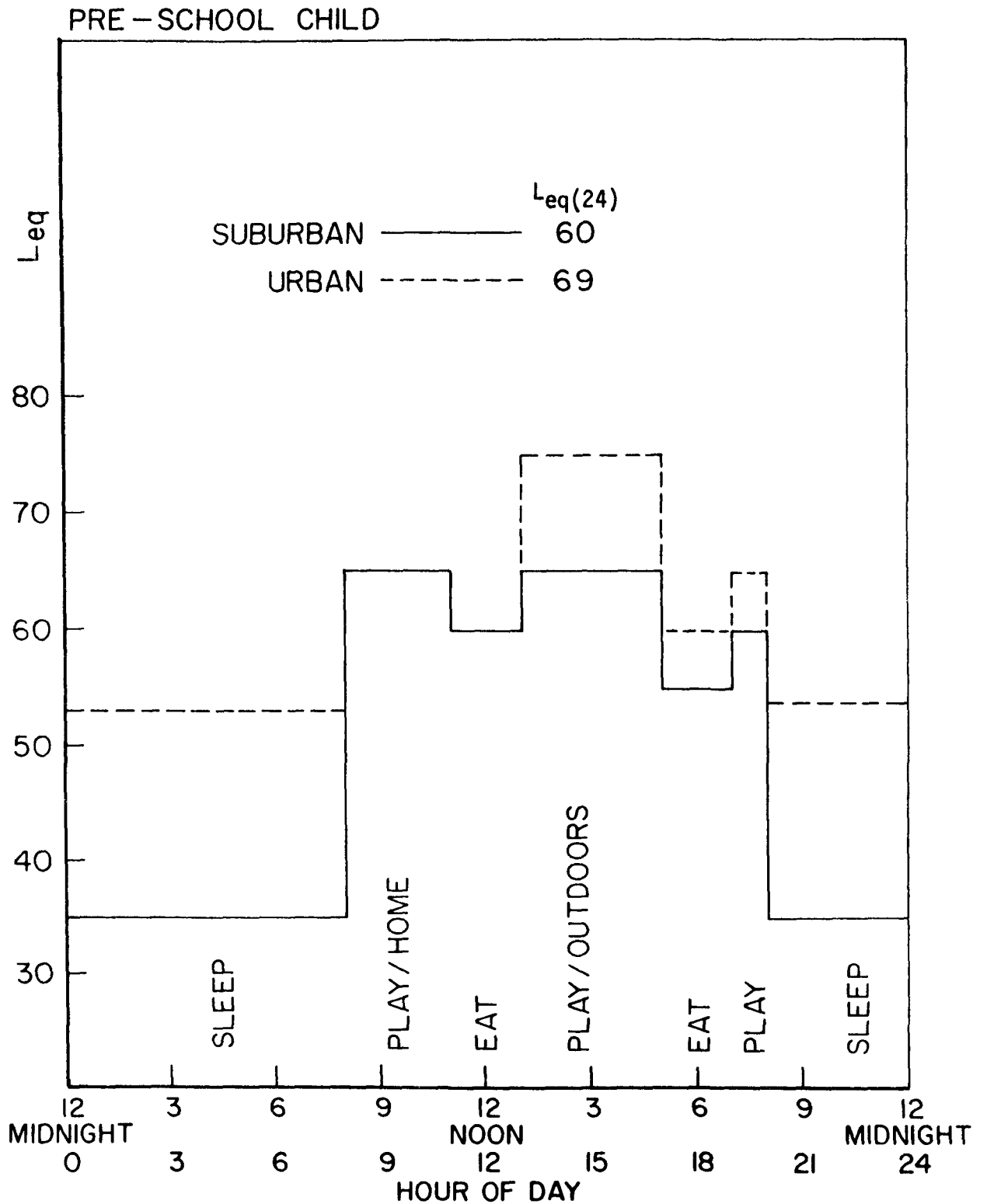


Figure B-7. Typical Noise Exposure Pattern of a Pre-School Child
B-1, B-4, B-8, B-9

Values for the Equivalent Sound level ($L_{eq}(24)$) experienced by the individual are computed from the basic formulation of L_{eq} . For each of these lifestyles, the $L_{eq}(24)$ value and the L_{dn} values are equivalent as the controlling noise dose normally does not occur at night. This emphasizes that for most practical situations, the average individual L_{dn} dose or $L_{eq}(24)$ individual dose are interchangeable.

Noise levels for other lifestyles could also be generated. However, it is important to remember that $L_{eq}(24)$ values are, in most cases, controlled by the 2-to 3-hour exposures to relatively high level noise. For example, assume a motorcycle rider rode his vehicle for 2 hours a day at an exposure of 100 dB producing an $L_{eq}(24)$ of 89; if this were the case, then other noise producing activities during the day would have little effect on the L_{dn} if they were at a level of at least 15 dB below the level of the motorcycle.

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APPENDIX C

NOISE-INDUCED HEARING LOSS

I. Introduction

A considerable amount of hearing loss data have been collected and analyzed. These data consist of measurements of hearing loss in people with known histories of noise exposure. Much of the analysis consists of collecting these measurements into populations of the same age with the same history of noise exposure and determining the percentile distribution of hearing loss for populations with the same noise exposure. Thus, the evidence for noise-induced permanent threshold shift can be clearly seen by comparing the distribution of a noise-exposed population with that of a relatively non-noise-exposed population.

Most of these data are drawn from cross-sectional research rather than longitudinal studies. That is, individuals or populations have been tested at only one point in time. Because complete noise-exposure histories do not exist, many conclusions are limited by the need to make certain hypotheses about the onset and progression of noise-induced hearing loss. Different hypotheses about the time history will lead to different conclusions even from the same data base, although the range of such conclusions is limited. Thus, in reaching conclusions about hearing loss, reliance is made on assumptions, hypotheses, and extrapolations which are not all universally accepted by the scientific community. However, attempts have been made to consider differing opinions and to insure that the methodology and conclusions in this section are in the mainstream of current scientific thought.

11. Basic Assumptions and Considerations

In order to proceed further, it is necessary to make the following well-based assumptions:

1. Hearing shifts in the "non-noise-exposed" populations are attributable to aging and other causes rather than to noise exposure.
2. As individuals approach the high end of the distribution and their hearing becomes worse, they become less affected by noise exposure. In other words, there comes a point where one cannot be damaged by sounds that one cannot hear.

In addition, there are some important considerations necessary for the identification of a level to protect against hearing loss.

A. Preservation of High Frequency Hearing

The levels identified in this document for hearing conservation purposes are those which have been shown to provide protection from any measurable degradation of hearing acuity. This protection is provided even for those portions of the hearing mechanism which respond to the audiometric frequency at which noise-induced hearing impairment first occurs, namely 4000 Hz. The definition of hearing handicap originated by the American Academy of Ophthalmology and Otolaryngology (AAOO), and currently incorporated in many hearing damage-risk criteria, is somewhat different from the definition used in this document. Hearing handicap, (and later, hearing impairment) was defined by a formula which used the average hearing level at 500 Hz, 1000 Hz and 2000 Hz.

Although hearing loss for frequencies above 2000 Hz is not treated as significant by most of the existing occupational hearing

damage-risk criteria, the ability to hear frequencies above 2000 Hz is important for understanding speech and other signals. Despite the traditional use of the term "speech frequencies" to apply to 500, 1000 and 2000 Hz, useful energy in speech sound ranges from about 200 to 6100 Hz.^{C-1} It has been known for many years that the equal discriminability point in the speech spectrum is at about 1600 Hz. That is, frequencies above 1600 Hz are equal in importance to those below 1600 Hz for understanding speech.^{C-1} However, there are other reasons for preserving the frequencies above 2000 Hz. Higher frequencies are important for the localization and identification of faint, high-pitched sounds in a variety of occupational and social situations. Detection of soft, relatively high-frequency sounds can be especially important in vigilance tasks, such as those which may occur in the military. In addition, good hearing for the higher frequencies is important to hear everyday occurrences such as sounds indicative of deterioration in mechanical equipment, crickets on a summer evening, bird song, and certain musical sounds. In fact, high-fidelity sound reproducing equipment is often promoted on the basis of its fidelity up to 15,000 Hz, or even 30,000 Hz.

Any measurable hearing loss at any frequency is unacceptable if the goal is protection of health and welfare with an adequate margin of safety. For most environmental noise, protection at 4000 Hz will insure that all other frequencies are protected.^{C-2} Thus, the 4000 Hz frequency has been selected as the most sensitive indicator of the auditory effects of environmental noise.

B. Significant Changes in Hearing

In this section an attempt will be made to determine the relation between exposure level and noise-induced permanent threshold shift (NIPTS). Before this is accomplished, however, the significance of various amounts of NIPTS needs to be addressed.

For the purposes of identifying the levels in this document, it was necessary to adopt a criterion for an allowable amount of NIPTS. Whereas a NIPTS of 0 dB would be ideal, it is not appropriate for the following reasons:

1. Most audiometric equipment does not have the capability to measure hearing levels in less than 5 dB steps.
2. There is no known evidence that NIPTS of less than 5 dB are perceptible or have any practical significance for the individual.
3. Individual hearing thresholds are subject to minor fluctuations due to transitory psychological or physiological phenomena.

NIPTS of considerably larger amounts have been permitted in various damage-risk criteria in the past. For instance, shifts of 10 dB to 20 dB have been considered reasonable.^{C-3} However, the requirement for an adequate margin of safety necessitates a highly conservative approach. This approach dictates the prevention of any effect on hearing, which is defined here as an essentially insignificant and unmeasurable NIPTS, i.e., a NIPTS of less than 5 dB. The available evidence consists of statistical distributions of hearing levels for populations at various exposure levels. The evidence of NIPTS, then, is the shift in the statistical distribution of hearing levels for a noise-exposed population in comparison to that of a non-exposed population.

III. Prediction of Noise-Induced Permanent Threshold Shift

A. Status of Hearing at 4000 Hz in the United States

Figure C-1 summarizes hearing levels of the general American population at 4000 Hz. The data is from the Public Health Survey (PHS) conducted in 1960-62 in the United States.^{C-4} Robinson's^{C-5} non-noise-exposed and otologically screened population is shown for comparison. Several points should be noted.

1. The hearing of a selected percentile of the population can be determined for various age groups. As displayed here, the higher the percentile point, the worse the hearing.

2. At age 11, there is no hearing difference due to sex^{C-6}, but for the 18-24 age group, a definite difference is evident, with men's hearing considerably worse.

3. Considering that there is no evidence for any sex-inherent differences in susceptibility to hearing impairment, it is most likely that the differences displayed are due to noise exposure.

B. The Effect of Noise on Hearing

Table C-1 summarizes the hearing changes expected for daily exposures to various values of steady noise, for an eight-hour day, over 10- and 40-year periods. ^{C-7}

Four different measurement parameters are considered in Table C-1:

1. Max NIPTS: The permanent change in hearing threshold attributable to noise. NIPTS increases with exposure duration. Max NIPTS is the maximum value during a 40-year exposure that starts at age 20. Data from the 90th percentile point of the population will be

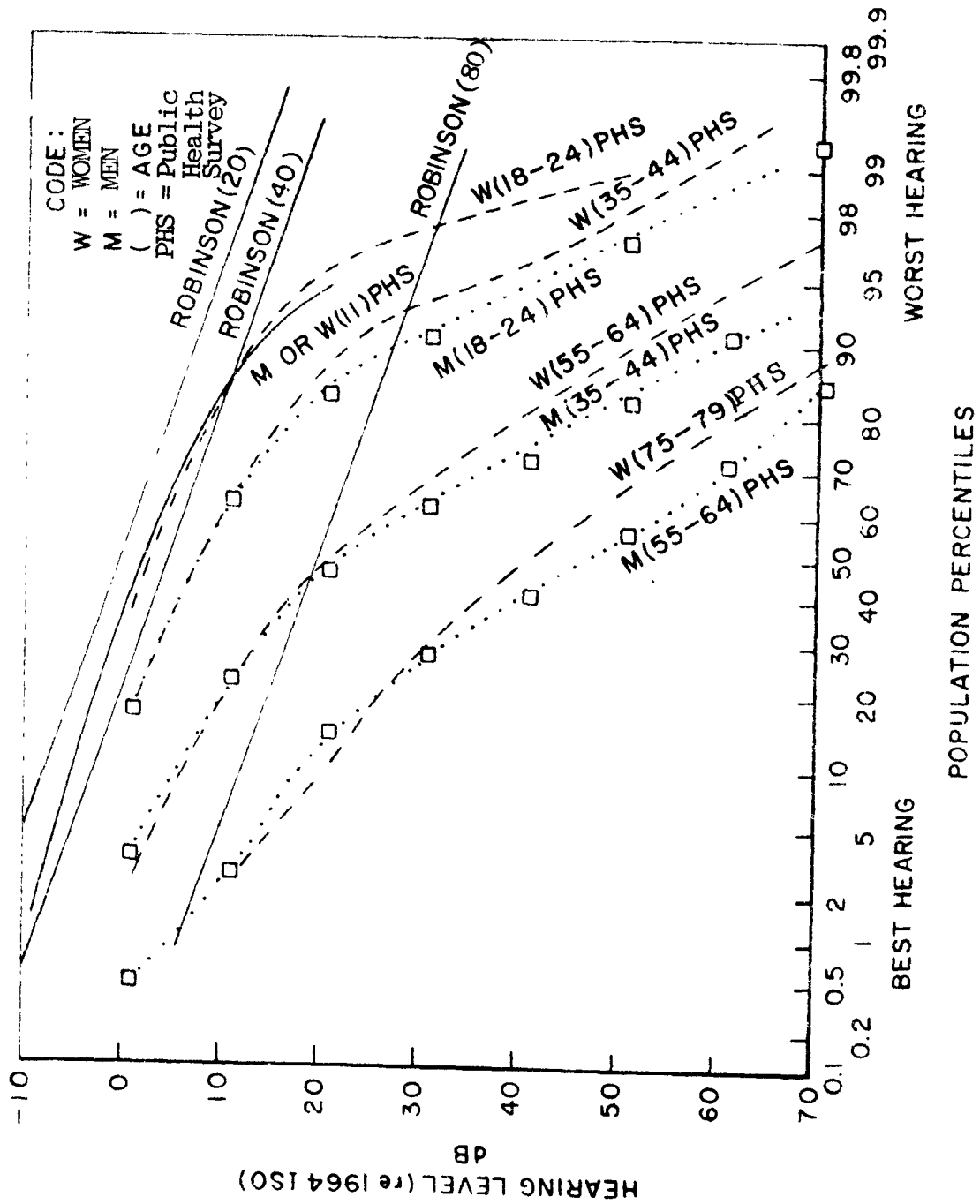


Figure C-1 Population Hearing Levels at 4000 Hz C-4, C-5, C-6

TABLE C-1

SUMMARY OF THE PERMANENT HEARING DAMAGE EFFECTS
EXPECTED FOR CONTINUOUS NOISE EXPOSURE AT
VARIOUS VALUES OF THE A-WEIGHTED AVERAGE
SOUND LEVEL C-7

	<u>75 dB for 8 hrs</u>		
	<u>av.0.5,1,2 kHz</u>	<u>av.0.5,1,2,4 kHz</u>	<u>4 kHz</u>
Max NIPTS 90th percentile	1 dB	2 dB	6 dB
NIPTS at 10 yrs. 90th percentile	0	1	5
Average NIPTS	0	0	
Max Nipts 10th percentile	0	0	0
	<u>80 dB for 8 hrs</u>		
	<u>av.0.5,1,2 kHz</u>	<u>av.0.5,1,2,4 kHz</u>	<u>4 kHz</u>
Max NIPTS 90th percentile	1 dB	4 dB	11 dB
NIPTS at 10 yrs. 90th percentile	1	3	9
Average NIPTS	0	1	4
Max NIPTS 10th percentile	0	0	2
	<u>85 dB for 8 hrs</u>		
	<u>av.0.5,1,2 kHz</u>	<u>av.0.5,1,2,4 kHz</u>	<u>4 kHz</u>
Max NIPTS 90th percentile	4 dB	7 dB	19 dB
NIPTS at 10 yrs. 90th percentile	2	6	16
Average NIPTS	1	3	9
Max NIPTS 10th percentile	1	2	5
	<u>90 dB for 8 hrs</u>		
	<u>av.0.5,1,2 kHz</u>	<u>av.0.5,1,2,4 kHz</u>	<u>4 kHz</u>
Max NIPTS 90th percentile	7 dB	12 dB	28 dB
NIPTS at 10 yrs. 90 percentile	4	9	24
Average NIPTS	3	6	15
Max NIPTS 10th percentile	2	4	11

Example: For an exposure of 85 dB during an 8-hour working day, the following effects are expected:

For the 90th percentile point, the Max NIPTS occurring typically during a 40-year work lifetime, averaged over the four frequencies of 0.5, 1, 2 and 4 kHz, is 7 dB; averaged over the three frequencies of 0.5, 1, and 2 kHz is 4 dB and 19 dB at 4 kHz. For this same 90th percentile point of the population, the expected NIPTS after only 10 years of exposure would be 6 dB averaged over the four frequencies, 2 dB averaged over three frequencies, and 15 dB at 4 kHz.

used to extrapolate to higher percentiles.

2. NIPTS at 10 years: The entries on this row also apply to the 90th percentile point of the population for 10 years of exposure.

3. Average NIPTS: The value of NIPTS is averaged over all the percentiles for all age groups. (This figure differs by only a couple of decibels from the median NIPTS after 20 years of exposure for the entire population.)

The values in Table C-1 are arithmetic averages of data found in the reports of Passchier-Vermeer^{C-8}, Robinson^{C-5}, and Baughn^{C-9}.

IV. Derivation of Exposure Levels

A. Selection of the Percentile and Related Exposure Level

The estimation of NIPTS for a given percentile has been accomplished by subtracting the hearing level of that percentile of the non-noise-exposed group from the hearing level of the respective percentile of the noise-exposed group. People above the 90th percentile are those whose hearing is worse than that of 90 percent of the population. Thus, for example, if the group at the 90th percentile shows a shift of 10 dB because of noise exposure, then it is considered that the group has a NIPTS of 10 dB. Extrapolations above the 90th percentile can be made from existing data, as done in Figure C-2. These extrapolations require cautious interpretation. First, the data for the 75 dB exposure levels in Table C-1 are themselves derived from extrapolations. The last firm data are at 78 dB. Second, for many of the studies that serve as the basis for the Passchier-Vermeer work, the 90th percentile is already extrapolated from the 75th percentile.

As stated earlier, the assumption has been made that if a person's hearing loss is severe enough, noise exposure will not make it worse. To be more precise, a person will not incur a hearing loss from a noise that he cannot (so long as it is within the audible frequency range). Granting this assumption, it follows that at 5000th percentile, the amount of NIPTS for a given exposure level will approach an asymptote. In order for further hearing loss to be incurred above this critical percentile point, greater exposure levels must occur. In the extreme, a person who is totally deaf cannot suffer noise-induced hearing loss.

A study of the data provides a basis for a reasonable estimate of this critical percentile. Baughn's data gives an indication that the population with a hearing level greater than 60 dB after a 40-year exposure begins to become less affected by noise (Figures 9, 10, and 11 of ref. C-2). For example, if a person has a hearing loss greater than 75 dB, it is not reasonable to expect that an A-weighted noise of 75 dB (which normally means that only a level of 65 dB would be present at the octave band centered at 4000 Hz) will cause a further increase of the 75 dB loss. Next, it is necessary to determine the distribution of hearing levels of the non-noise-exposed population at age 60. The best data available are the hearing levels of 60 year-old women of the 1960-62 Public Health Survey^{C-4}. While certainly some of the women in the sample may be noise exposed, the noise exposure of that population sample can be considered minor as compared to the apparent noise exposure of men. The data from the Public Health Survey predict the percentage of the population with hearing levels above 70, 75, and 80 dB.

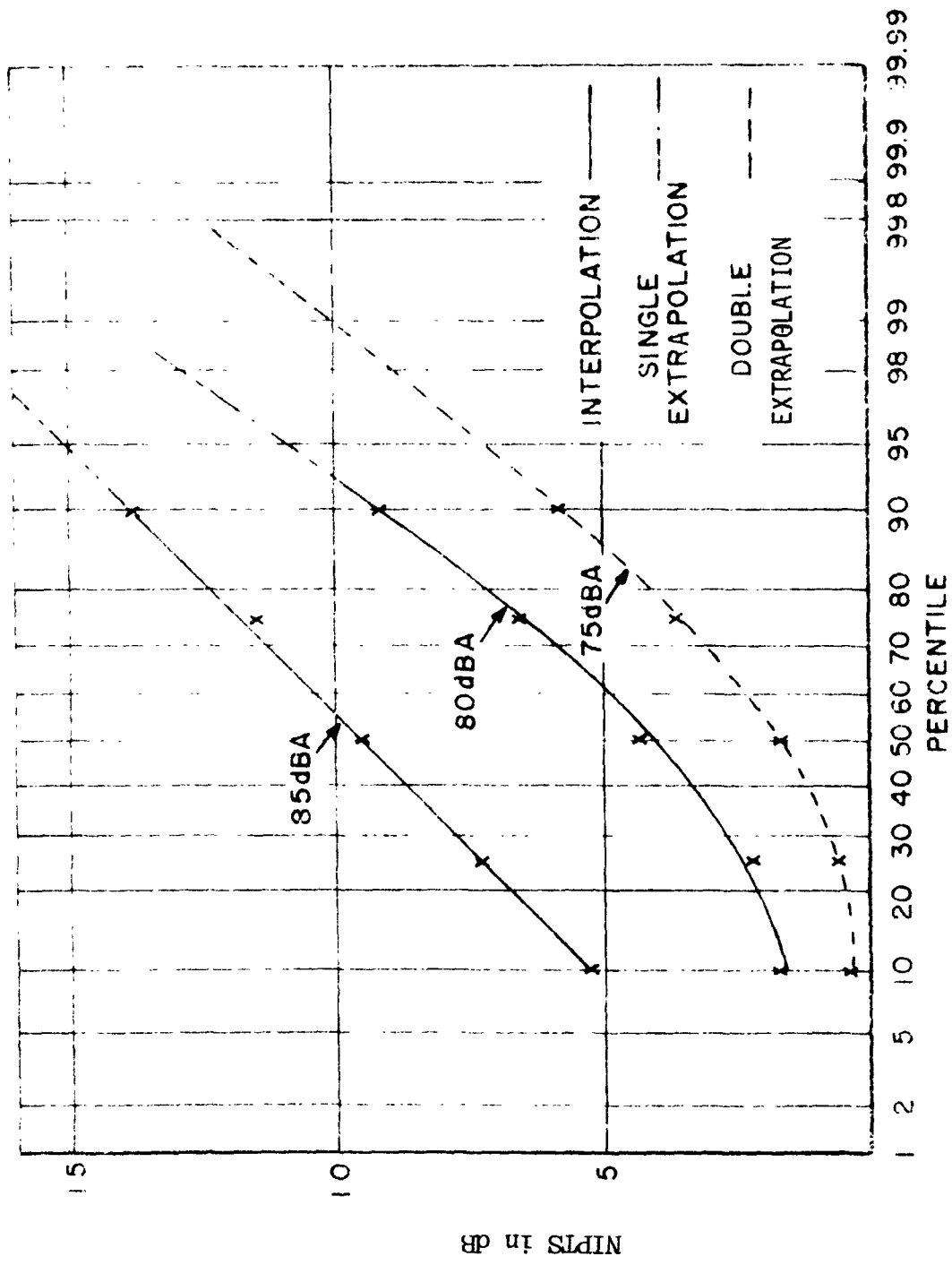


Figure C-2. NIPTS At 4000 Hz Across Percentiles
For Various 40-YR Exposure Levels C-2

Figure C-3 shows the exposure levels at which no more than 5 dB NIPTS at 4000 Hz will occur for various percentiles on the lowermost curve. The curve labeled PHS-4000 Hz represents hearing levels by percentiles of the non-noise exposed population. If a noise level that cannot be heard by an individual is assumed not to change his hearing level, then the extrapolated 5 dB NIPTS curve of Figure C-3 cannot cross the curve labeled PHS. In fact, the 5 dB NIPTS curve must turn upward and merge with the PHS curve, shown in Figure C-3 by the dotted line. The point of merging is seen to be at approximately the 96th percentile and the exposure level required to protect this percentile from a shift of more than 5 dB is an $L_{eq(8)}$ of 72 to 74 dB, or approximately 73 dB. It may be concluded therefore, that a 40-year noise exposure below an $L_{eq(8)}$ of 73 is satisfactory to prevent the entire statistical distribution of hearing levels from shifting at any point by more than 5 dB. Generalizing from these conclusions, the entire population exposed to $L_{eq(8)}$ of 73 is protected against a NIPTS of more than 5 dB.

A similar analysis can be made for 5 dB and 10 dB NIPTS at the mid frequencies (Figure C-4). The upper PHS curve represents the better ear data for the average of 500, 1000 and 2000 Hz of both men and women from the Public Health Survey^{C-4}. Both men and women are used since there is little difference due to sex and hearing levels for these frequencies. Considering that the curves will merge in the same manner as the 5 dB at 4000 Hz NIPTS and PHS curves, one can conclude that:

1. $L_{eq(8)}$ of 84 dB will cause no more than a 5 dB shift at the critical percentile for the averaged frequencies 500, 1000 and 2000 Hz.

HEARING LEVEL FOR PHS CURVE RE 20 MICROPASCALS

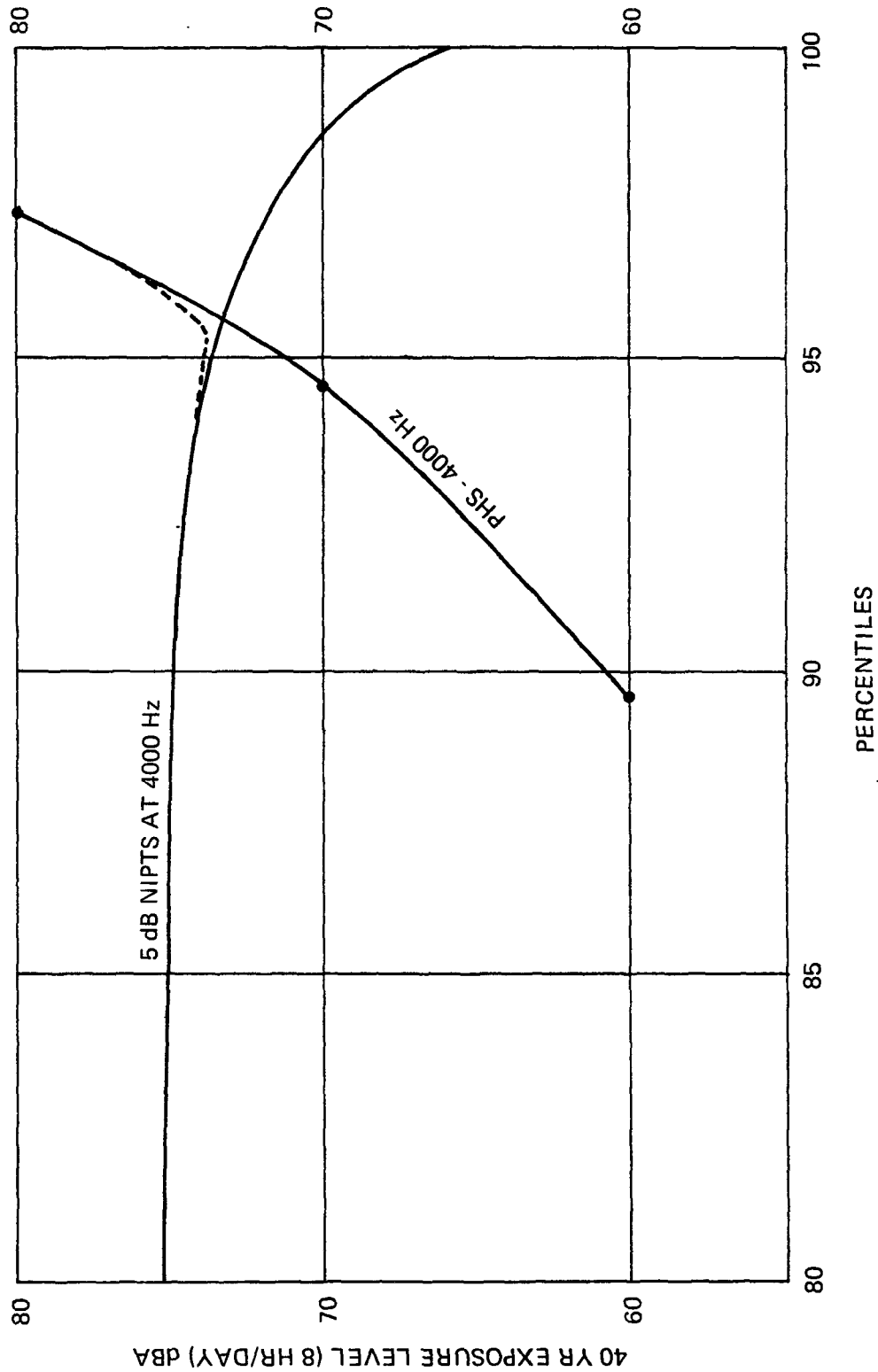


FIGURE C- - Exposure Level and Hearing Level as a Function of Population Percentile, Showing the 5 dB NIPTS Curve Merging with the PHS 4000 Hz Curve

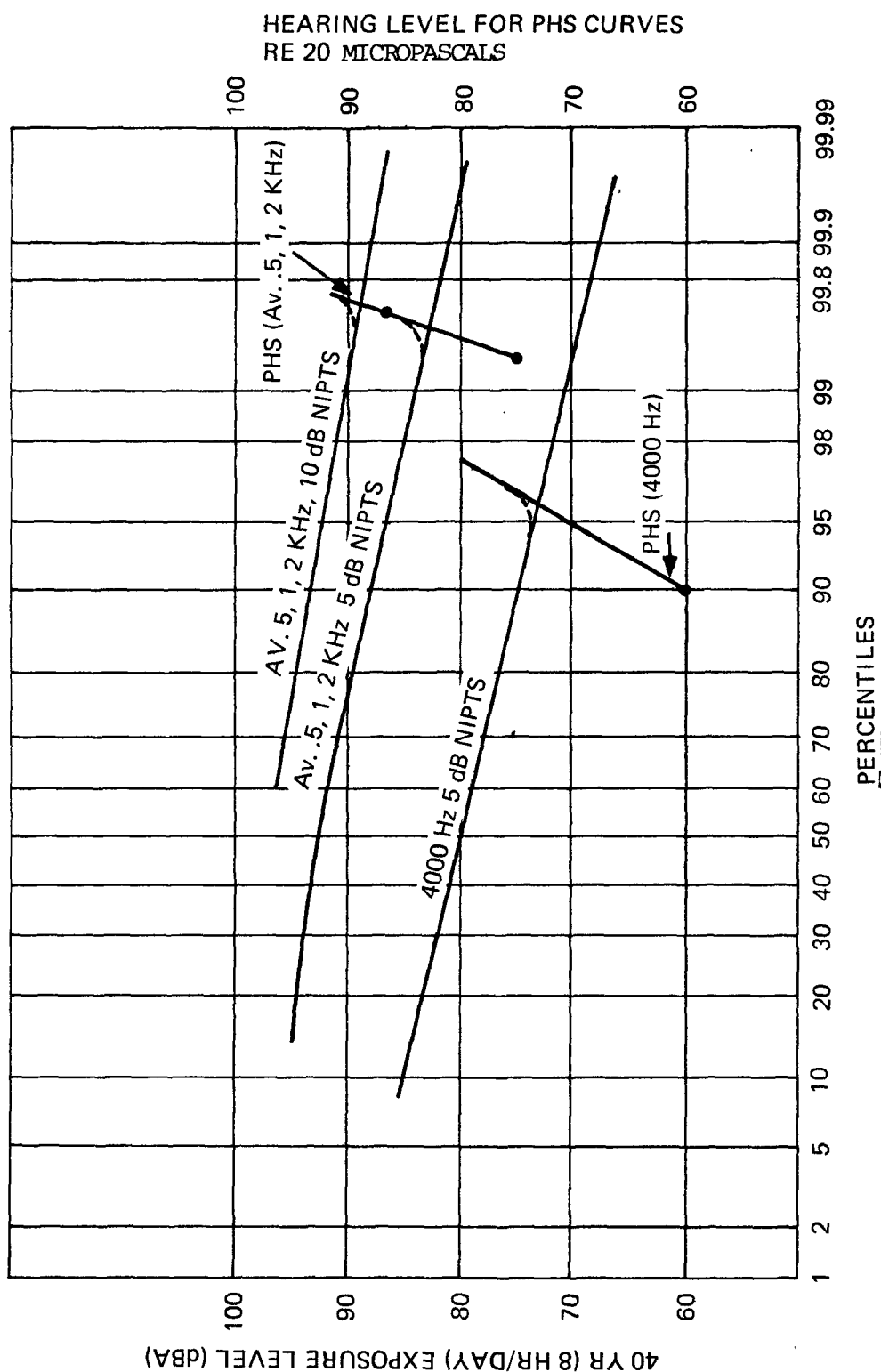


FIGURE C-4 - Exposure Level and Hearing Level as a Function of Population Percent Showing Merging of Different NIPTS Curves with PHS Curves

2. $L_{eq}(8)$ of 89 dB will cause no more than a 10 dB shift at the most critical percentile for the averaged frequencies 500, 1000 and 2000 Hz.

Although the data base used here is quite large, we cannot be absolutely certain that it is representative of the whole population. Any argument such as that presented above does not, in fact, provide 100% protection of the entire population. Obviously, there are a few individuals who might incur more than 5 dB NIPTS for an exposure level of 73 dB. There is the possibility that individuals might shift from lower to higher percentiles with a change in exposure level. In other words, there may be individuals who experience greater shifts in hearing level than those predicted here over periods of time much less than 40 years.

At this point, it may be useful to examine the same data in a slightly different way, without utilizing the concept of the critical percentile. Assuming that the NIPTS of the exposed population are distributed normally, the exposure levels which produce various amounts of NIPTS at the 50th and 90th percentiles may be extrapolated to levels which produce NIPTS at the 99th percentile. Using this extrapolation, Figure C-5 shows NIPTS as a function of exposure level for the 50th, 90th and 99th percentiles. The 99th percentile curve intersects the 5 dB NIPTS point at 71.5 dB (which is only 1.5 dB below the level previously identified). Thus, if one wishes to protect up to the 99th percentile without employing the concept of the critical percentile, the exposure level necessary to prevent more than 5 dB NIPTS is an $L_{eq}(8)$ of 71.5 dB.

The preceding analysis utilizing the concept of the critical percentile, concludes that an 8-hour per day exposure to a 73 dB steady

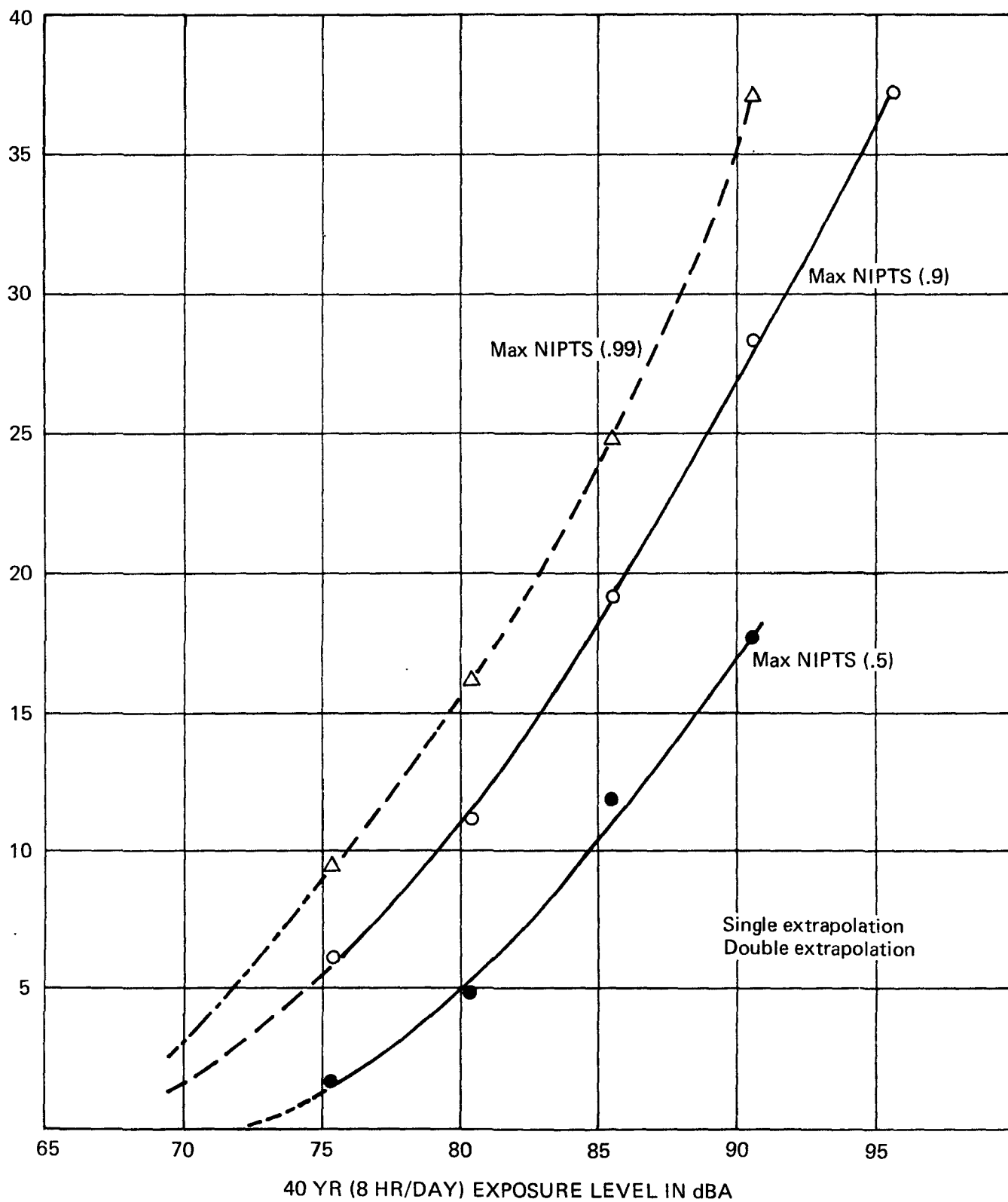


FIGURE C-5 NIPTS as a Function of Exposure Level for the 50th, 90th and 99th Percentiles.

noise for 40 years will result in a noise-induced permanent threshold shift of no more than 5 dB at 4000 Hz. This conclusion was reached through the use of assumptions and considerations pointed out earlier in this appendix. Similar analysis of the same and similar data may be made using other assumptions and considerations. Some analyses lead to essentially the same conclusion while others do not. However, no such analysis has identified a level of much less than 65 dB or much greater than 80 dB for the same conditions (i.e., 5 dB NIPTS at 4000 Hz for 40 years of exposure). While the discussion of these levels and their derivations are a subject of great interest and activity in the scientific community, the Administrator of the Environmental Protection Agency is required to identify the level which, in his judgment, is requisite to protect public health and welfare. For that purpose, the level of 73 dB appears to be the most reasonable choice for the conservation of hearing based on the present state of scientific knowledge.

B. Adjustments for Intermittency and Duration

The next step is to transpose this level into one which will protect public health and welfare, in terms of environmental noise exposure, with an adequate margin of safety. For this purpose, it is necessary to correct for intermittency and to extrapolate to 24 hours. In order to do this, two hypotheses are necessary -- the TTS Hypothesis and the Equal Energy Hypothesis.

The TTS Hypothesis states that a temporary threshold shift measured 2 minutes after cessation of an 8-hour noise exposure closely approximates the NIPTS incurred after a 10- to 20-year exposure to that

same level. There is a substantial body of data supporting this hypothesis.

The Equal Energy Hypothesis states that equal amounts of sound energy will cause equal amounts of NIPTS regardless of the distribution of the energy across time. While there is experimental confirmation and general acceptance of this hypothesis, certain types of intermittency limit its application.

1. Intermittency

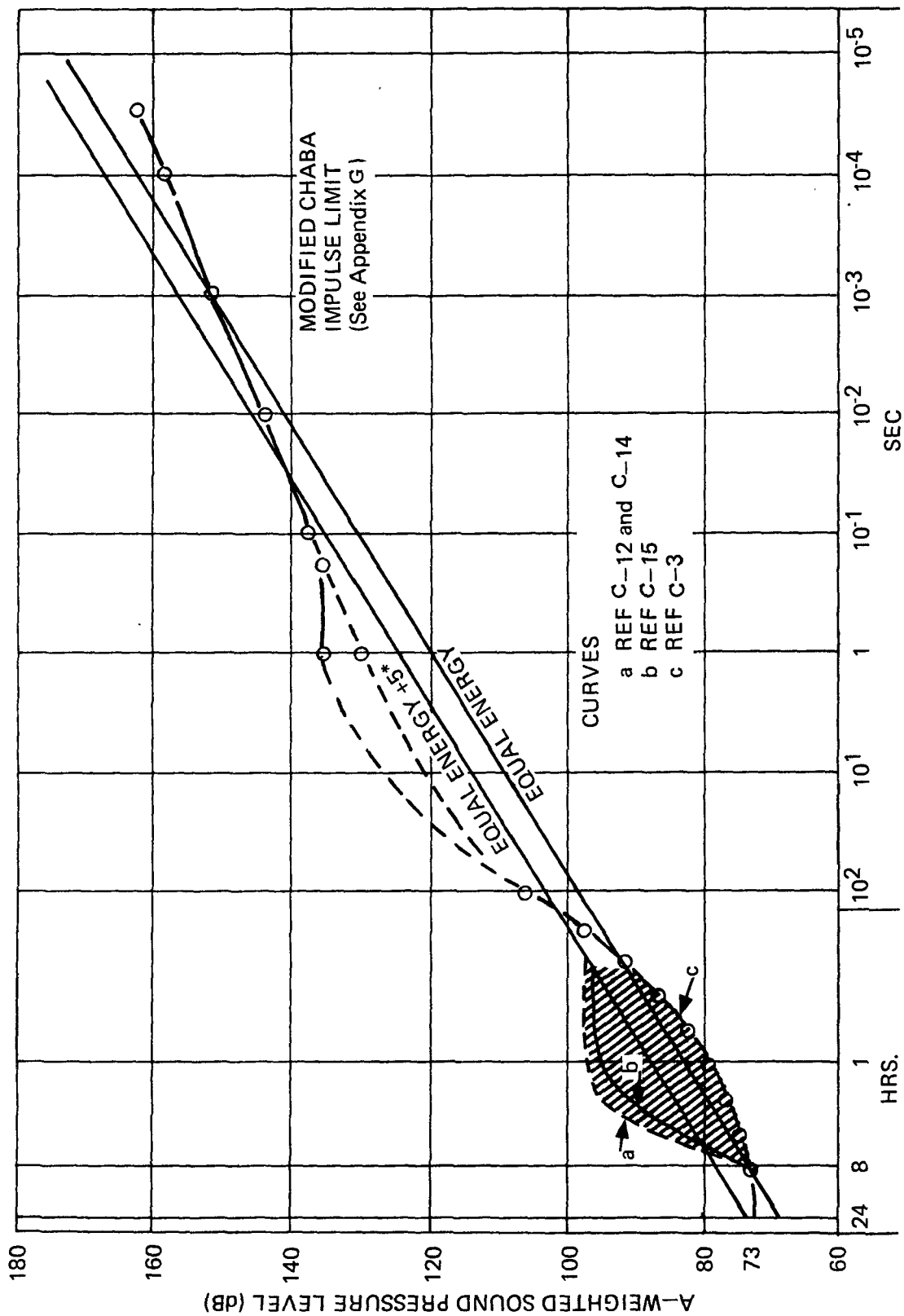
The equal energy concept is considered by some to be a conservative approach for short exposure periods. An alternative approach may be necessary because there is little direct evidence to show the effect of short exposure periods or intermittency on the development of NIPTS. This approach implies the use of temporary threshold shift as a predictor of NIPTS.

Even for a continuous noise, TTS is not predictable for all possible durations using the equal energy rule. The equal energy rule predicts, with reasonable accuracy, the TTS at 4000 Hz for durations of 8 hours down to about 30 minutes. Effects from durations shorter than this, however, are better predicted by a slight deviation from the equal energy rule. While equal energy provides for a 3 dB increase in exposure level for each halving of exposure duration, TTS for durations of less than 30 minutes are better predicted by greater intensities for each halving of time. For instance, TTS for durations of less than 15 minutes are better predicted by a 6 dB rather than a 3 dB increase. For an exposure of two minutes duration, the level required to produce an expected TTS at 4000 HZ would be approximately 10 dB greater than the

level predicted by the equal energy concept.

Investigations of environmental noise patterns reported in the EPA document "Community Noise"^{C-10} indicate that in most environments, noise fluctuates or is intermittent. Moreover, intermittent noise for a given L_{eq} having peak levels of 5 to 15 dB higher than the background level, may produce less hearing damage than a continuous noise with the same energy.^{C-11} Also, noise levels which are below 65 dB for 10 percent of the time tend to be less dangerous than continuous noise.^{C-12} Therefore, intermittent noise as used in this document will be defined as noise which is below 65 dB for about 10 percent of each hour (i.e., L_{90} of less than 65 dB), with peak levels of 5 to 15 dB higher than the background. From the examples cited in "Community Noise", it is clear that most environmental noise meets these criteria. For this reason, the L_{eq} measured in many situations can be expected to produce less harmful effects on hearing than those depicted in Table C-1. Some correction factor is thus indicated for L_{eq} values describing noise expected in a typical environmental situation in which the exposure is relatively intense but intermittent in nature.

In order to determine an appropriate correction factor, Figure C-6 has been drawn. Using an exposure of 73 dB for 8 hours as a baseline, the sound pressure levels producing equal TTS_2 to be expected at 4000 Hz are plotted for durations of continuous noise as short as 1-1/2 minutes.^{C-3} Plotted also (curve a), is the maximum intermittency correction suggested by "Second Intersociety Committee"^{C-13} and discussed in the NIOSH criteria document.^{C-11} This correction is for the mid



Equal TTS Curves for 4000 Hz

TIME

FIGURE C-6. Equal TTS Curves for 4000 Hz

* With 5 dB correction for intermittency added.

NOTE: Impulse noise is defined as $L_{eq} \approx \text{PEAK} - 9 \text{ dB}$. Shaded area indicates area of uncertainty.

frequencies. Recent work has indicated that for 4000 Hz the best intermittency correction to produce equal TTS_2 is represented by curve b.^{C-14} The crosshatched area between the curves "a" and "c" signifies the area of uncertainty.

In addition, TTS curves for impulse noise are included in Figure C-6. Appendix G contains the details of the modified CHABA limit and the conversion necessary to derive from the peak sound pressure level of a decaying impulse the continuous A-weighted noise of the same duration. The impulse noise data show that the equal energy concept is still a reasonable approximation for very short durations. While certainly it may be overly protective for some noise patterns, in general it predicts the effects of noise on hearing reasonably well. Prediction is improved, however, with a 5 dB allowance for intermittency.

The average correction for intermittency suggested by Figure C-6 is 5 dB (i.e., placing the origin of the equal energy line at 78 dB for 8 hours). This correction should be used only if the noise level between events is less than 65 dBA for at least 10 percent of the time ($L_{90} < 65$ dBA). Since most environmental noise exposures will meet this requirement during any 8-hour period, it is further suggested that environmental noise should be considered intermittent unless shown otherwise. Using the 5 dB correction factor, the area of uncertainty (crosshatched) of Figure C-6 is approximately bisected. Further support for such a 5 dB correction factor is found in a recent Swedish study where exposure to continuous noise of L_{eq} 85 to 90 caused a hearing loss which corresponded to an intermittent noise of L_{eq} 90 to 95. The

authors conclude that a 5 dB correction factor is appropriate.^{C-15}

For certain noise situations, a larger intermittency correction might be justified. However, the use of large corrections when only part of the total noise exposure pattern is known entails a considerably higher chance of error. Therefore, the use of correction factors higher than 5 dB for intermittency are not considered consistent with the concept of an adequate margin of safety.

2. Conversion of 8-Hour to 24-Hour Exposure Levels

The TTS after 24 hours of exposure generally exceeds that after 8 hours of exposure by about 5 dB.^{C-2} Thus the use of a 5 dB correction factor is suggested to extrapolate from the 8-hour exposure data to 24-hour exposure.^{C-2} For example, the predicted effects of an exposure to 75 dB steady-state noise for a 24-hour duration are equivalent to the effects estimated from industrial studies for an 8-hour exposure to a continuous noise with a level of 80 dB. This 5 dB correction is consistent with the equal-energy trade-off between exposure duration and noise level. That is, the equal-energy rule in this case also dictates a correction of 5 dB for 24 hours.

It appears that exposures over a period longer than 24 hours need not be considered in this case. Various studies of TTS^{C-16, C-17, C-18} have shown that, for an exposure to a specific noise level, TTS will not exceed a limiting value regardless of exposure duration. This limit is reached at approximately 24 hours of exposure. However, this concept applies only to exposure levels less than 85 dB.

3. Conversion of Occupational Dose to a Full Year (250 to 365 Days)

The applicability of occupational data to non-occupational exposure is questional in several ways. One concern is the use of the occupational exposure data to predict the general effects on populations composed of people who, for a variety of reasons, do not work. However, there are no data from which to derive approximate correction factors. Another concern is the fact that the occupational data are based on a 250-day working year. When predicting the effect of a known noise exposure over the 365-day year, certainly some correction is in order. The equal energy concept would predict at least a 1.6 dB lowering of the exposure level, and such a correction should be used when the concept of an annual exposure dose is used.

To summarize the adjustments, the following exposures over 40 years will result in the same effect:

- . L_{eq} of 73 dB continuous noise during the 8-hour working day with relative quiet for the remaining 16 hours, 5 days per week. (See discussion of quiet requirements below).
- . L_{eq} of 78 dB intermittent noise during the 8-hour working day with relative quiet for the remaining 16 hours, 5 days per week.
 $73 + 5 = 78$
- . L_{eq} of 76.4 dB intermittent noise for 8 hours a day, with relative quiet for the remaining 16 hours, for the 365-day year.
 $78 - 1.6 = 76.4$

- . L_{eq} of 71.4 dB intermittent noise for 24 hours
a day, 365 days a year.
 $76.4 - 5 = 71.4$

In view of possible uncertainties in the analysis of the data, it is considered reasonable to round down from 71.4 dB to 70 dB. These uncertainties will be discussed in the next section.

V. Considerations for Practical Application

A. The Data Base

In viewing the data in this appendix, and elsewhere in the hearing impairment literature, a number of fundamental considerations must be noted:

1. Few, if any, of the various "classic studies" (e.g., those of Robinson, Baughn, and Passchier-Vermeer) are on comparable populations. In addition, some of the data are derived from populations for which noise exposure histories are sketchy, if not absent (e.g., the 1960-62 U.S. Public Health Survey data).

2. There are major questions regarding the comparability of the audiometric techniques used in the various surveys.

3. There are a great number of unanswered questions and areas of uncertainty with regard to the relationship of individual physiological and metabolic state to hearing ability. The role of the adequacy of the blood supply to the ear (and the possible influence of changes in that blood supply resulting from cardio-vascular respiratory disease or the process of aging), as well as the fundamentals of cellular physiology involved in adverse effects within the organ of Corti, simply cannot be

stated with any degree of reliability at this time. There is some evidence that these non-noise related influences may be of major significance. Moreover, part of the adverse effect of noise on hearing may be attributable indirectly to these influences.

4. There are no large-scale longitudinal studies on hearing loss in selected and carefully followed populations, whose physical state and noise exposure has also been carefully detailed.

B. Accuracy of Estimated Effects

There is imperfect agreement among various studies as to the exact relationship between sound exposure level and noise-induced hearing loss. The range of error involved is on the order of 5 dB^{C-2} when examining the difference between the values in any single study and the values presented in Table C-1. Furthermore, the intermittency correction of 5 dB is only an approximation. It has been proposed that a correction as high as 15 dB could be used in some cases. Thus, the true intermittency correction for a particular noise exposure situation could be from 0 - 15 dB

The selection of alternative population percentiles to be protected would cause relatively small changes. For instance, there is only a 7 dB difference in protecting the 50th percentile against incurring a 5 dB hearing loss instead of the 96th percentile.

Using the assumption that the noise is of broadband character can lead to errors of 5 to 10 dB by which the risk of the sound exposure is underestimated. This could lead to greater possible errors if a substantial portion of the exposure is to noise with intense pure tone components. These conditions, however, are rare in the environmental situation.

There are apt to be errors in extrapolating beyond the 90th percentile in order to predict effects at higher percentiles. Likewise, there might be errors in extrapolating from known exposure data at 90 and 80 dB to estimated effects at 73 dB for an 8-hour exposure to continuous noise.

One final potential source of error inherent in using the occupational data is the need to compare the population which has received an occupational noise exposure to population that has not received an occupational noise exposure. This latter population may, however, have been exposed to levels of environmental noise (other than occupational). As a consequence in comparing the two groups, occupational exposures may very well show negligible effects below a certain level because other environmental noises predominate. The direction of the possible error is not unequivocally clear, as certainly the adverse effect of many industrial exposures may very well have been due to an unfortunate combination with non-occupational exposures. At this time, it is impossible to properly analyze the possible bias that the non-occupational noise exposure introduces into the data of Table C-1. At present it is assumed to be negligible. This assumption will require ultimate verification by experimentally relating the annual exposure dose of individuals to their hearing level. Only such studies will show how much of what we now tend to contribute to the physiological aging process of the hearing mechanism could be reduced by further reducing what we consider today as "normal" or "quiet" environmental noise levels associated with present-day living in our society.

C. Quiet Requirements

It has been shown that the quiet intervals between high intensity noise-bursts must be below 60 dB SPL for the octave band centered at 4000 Hz if recovery from temporary threshold shift at 4000 Hz is to be independent of the resting sound pressure level.^{C-20} In this document, sound pressure level of 50 dB in the 4000 Hz octave band is suggested as a goal for "effective quiet" For typical spectra of community noise, 50 dB SPL in the 4000 Hz octave band translates to an A-weighted sound level of approximately 60 dB. Thus, for purposes of hearing conservation, the noise level where an individual sleeps should not be above an L_{eq} of 60 dB, based on the following considerations:

1. Total TTS recovery is required to prevent TTS from becoming NIPTS.
2. For some individuals, an 8-hour nighttime period is the only available recovery period.
3. In order to be consistent with the identified level of $L_{eq}(24) = 70$, an 8-hour exposure of 75 dB would require an exposure of 60 dB or less for the remaining 16 hours.

It should be noted that this level would be too high to protect against other effects. (See Appendix D)

D. Contribution of Outdoor Noise to the Total Exposure in Residential Areas

A person's 24-hour exposure to outdoor noise will typically include both outdoor and indoor exposures. Since a building reduces the level of most intruding outdoor environmental noises by 15 dB or more (windows partially open), an outdoor L_{eq} will not adequately predict

hearing effects, because the corresponding NIPTS estimates will be too high. Consider a situation where the average sound level is 70 dB outdoors and 55 dB indoors. The effective noise exposures for some of the possible exposure situations are:

		24-hour L_{eq} in dB		(assuming the noise is generated outdoors)
Indoor Time (55 dB)	Outdoor Time (70 dB)	Combined Indoor & Outdoor	Outdoor Only	
24 hrs	0 hrs	55.0	-	
23	1	58.6	56.2	
22	2	60.5	59.2	
21	3	61.8	61.0	
20	4	62.9	62.2	
16	8	65.5	65.2	
8	16	68.3	68.2	
0	24	70	70	

The 24-hour value of the combined L_{eq} is essentially unchanged from the outdoor value (less than one dB) by the indoor noise exposure, so long as the outdoor exposure exceeds 3 hours. Thus, as long as the criterion is established with respect to outdoor noise exposure exceeding 3 hours per day, the contribution of the indoor level of intruding outdoor noise may be neglected in computing the 24 hour L_{eq} . This conclusion does not depend greatly on the actual noise attenuation provided by the house so long as the attenuation is greater than 10 dB.

E. Relation of L_{dn} to L_{eq} in Residential Areas

Although in residential areas, or in areas where individuals may be expected to be present for prolonged periods of time, it would

appear desirable for practical considerations to use only one measure of noise, such as L_{dn} , it may be misleading to do so. The difficulty arises from the fact that to relate hearing loss to noise exposure, the basic element to consider is the actual energy (not weighted) entering the ear during a twenty-four hour period. L_{eq} measures the actual energy entering the ear whereas L_{dn} includes a 10 dB weighting for the nighttime period. Thus, L_{dn} values corresponding to actual L_{eq} values are dependent upon the distribution in noise levels occurring during the total twenty-four hour period and could be misleading. For example, the L_{dn} values corresponding to $L_{eq(8)}$ are between 0 to 6 dB greater than the L_{eq} values. The lower value corresponds to a situation where the average sound level during the night is 10 dB lower than that occurring during the day, whereas the higher value corresponds to the situation when the average sound level during the night equals that occurring during the day. In residential areas, the difference in L_{eq} values for the daytime and nighttime period often is approximately 4 dB based on community noise measurements.^{C-20} In this particular case, this difference in L_{eq} values leads to an L_{dn} value which is three decibels above the L_{eq} value for the daytime period.

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APPENDIX D

NOISE INTERFERENCE WITH HUMAN ACTIVITIES AND RESULTING OVERALL ANNOYANCE/HEALTH EFFECTS

Environmental noise may interfere with a broad range of human activities in a way which degrades public health and welfare. Such activities include:

1. Speech Communication in Conversation and Teaching .
2. Telephone Communication .
3. Listening to TV and Radio Broadcasts .
4. Listening to Music.
5. Concentration During Mental Activities .
6. Relaxation.
7. Sleep .

Interference with listening situations (1-4) can be directly quantified in terms of the absolute level of the environmental noise and its characteristics. The amount of interference in non-listening situations (e.g.,) is often dependent upon factors other than the physical characteristics of the noise. These may include attitude towards the source of an identifiable noise, familiarity with the noise, characteristics of the exposed individual, and the intrusiveness of the noise.

The combination of the various interference effects results in an overall degradation of total well-being. Maximum noise levels that do not affect human well-being must be derived from the body

of information on human behavioral response to various noise environments.

I. Speech Interference

Speech communication has long been recognized as an important requirement of any human society. It is one of the chief distinctions between humans and other species. Interference with speech communication disturbs normal domestic or educational activities, creates an undesirable living environment, and can sometimes, for these reasons, be a source of extreme annoyance. Continued long-term annoyance is considered to affect individual as well as public health and welfare in a variety of ways.

Noise can disturb speech communication in situations encountered at work, in vehicles, at home, and in other settings. Of chief concern for the purposes of this report, is the effect of noise on face-to-face conversation indoors and outdoors, telephone use, and radio or television enjoyment.

The extent to which environmental noise affects speech communication depends on the location (whether indoors or outdoors), the amount of noise attenuation provided by the exterior walls when indoors (including windows and doors), and the vocal effort of the talkers. Certainly, it is possible to maintain communication in the face of intruding noise if the voice level is raised, but in an ideal environment, one should not have to increase the voice

level above that which is comfortable in order to communicate easily.

Research since the late 1920's has made great progress in quantitatively characterizing the effects of noise on speech perception. A review of that work is contained in references D-1 and D-2, and it is summarized here as the basis for the maximum environmental noise levels compatible with public health and welfare identified in Section IV of this report.

The chief effect of intruding noise on speech is to mask the speech sounds and thus reduce intelligibility. The important contributants to intelligibility in speech sounds cover a range in frequency from about 200 to 6000 Hz, and at each frequency a dynamic level range of about 30 dB.

The intelligibility of speech will be nearly perfect if all these contributions are available to a listener for his understanding. To the extent that intruding noise masks out or covers some of these contributions, the intelligibility deteriorates more rapidly the higher the noise level, particularly if the noise frequencies coincide with the important speech frequencies.

It is no accident, from an evolutionary point of view, that the hearing of humans is most sensitive in the frequency range most important for the understanding of speech. Therefore, it is not mere coincidence that the A-weighting, designed to reflect the frequency sensitivity of the human ear, should also be useful as a

measure of the speech interference potential of intruding noise. A-weighting gives greatest weight to those components of the noise that lie in the frequency range where most of the speech information resides, and, thus, yields higher readings (A-weighted levels) for noises in most of the 200 to 6000 Hz range than does the overall sound pressure level. A-weighted sound levels will be used throughout this appendix unless otherwise noted.

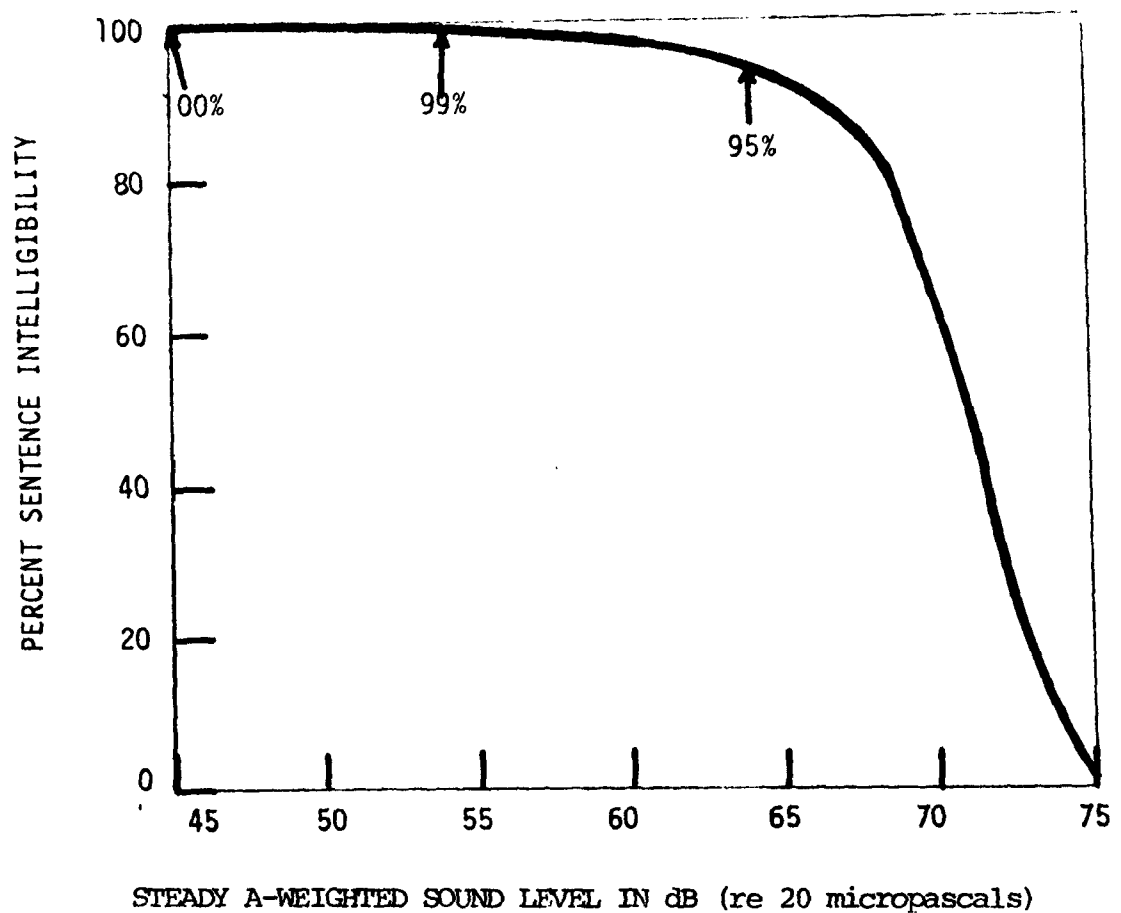
The principal results of relevant speech research can be utilized for practical application to provide the levels of noise that will produce varying degrees of masking as a function of average noise level and the distance between talkers and listeners. Other factors such as the talker's enunciation, the familiarity of the listener with the talker's language, the listener's motivation and, of course, the normality of the listener's hearing also influence intelligibility. This value is consistent with the upper end of the range of levels of steady state sound recommended by prior authors in Table D-10 (to be discussed later) as "acceptable" for design purposes for homes, hotels, motels, small offices, and similar spaces where speech communication is an expected and important human activity.

A. Indoor Speech Interference Due to Steady Noise

The effects of masking normally-voiced speech indoors are summarized in Figure D-1, which assumes the existence of a reverberant field in the room. This reverberant field is the

result of reflections from the walls and other boundaries of the room. These reflections enhance speech sounds so that the decrease of speech level with distance found outdoors occurs only for spaces close to the talker indoors. At distances greater than 1.1 meters from the talker, the level of the speech is more or less constant throughout the room. The distance from the talker at which the level of the speech decreases to a constant level in the reverberant part of the room is a function of the acoustic absorption in the room. The greater the absorption, the greater the distance over which the speech will decrease and the lower the level in the reverberant field for a given vocal effort. The absorption in a home will vary with the type and amount of furnishings, carpets, drapes and other absorbent materials. It is generally least in bathrooms and kitchens and greatest in living rooms, with typical values ranging between 150 and 450 sabins. A typical value for living rooms and bedrooms is 300 sabins. For this value of absorption, the distance to the reverberant field from the talker is slightly greater than one meter, as stated above.

As shown in Figure D-1, the maximum sound level that will permit relaxed conversation with 100% sentence intelligibility throughout the room (talker-listener separation greater than approximately 1.1 meter) is 45 dB.



NOTE: Assumes 300 sabins absorption typical of living rooms and bedrooms and is valid for distances greater than one meter.

Figure D-1. Normal Voice Sentence Intelligibility as a Function of the Steady Background Sound Level in an Indoor Situation D-1, D-2, & D-4

B. Outdoor Speech Interference Due to Steady Noise

The sound level of speech outdoors generally continues to decrease with increasing distance between talker and listener with the absence of reflecting walls which provide the reverberance found indoors. Figure D-2 presents the distances between talker and listener for satisfactory outdoor conversations, in different steady background noise levels (A-weighted), for three degrees of vocal effort. This presentation depends on the fact that the voice level at the listener's ear (outdoors) decreases at a predictable rate as the distance between talker and listener is increased. In a steady background noise there comes a point, as the talker and listener increase their separation, where the decreasing speech signal is masked by the noise.

The levels for normal and raised-voice "satisfactory conversation" plotted in the figure do not permit perfect sentence intelligibility at the indicated distances; instead, the sentence intelligibility at each distance is 95 percent, meaning that 95 percent of the key words in a group of sentences would be correctly understood. Ninety-five percent sentence intelligibility usually permits reliable communication because of the redundancy in normal conversation. That is, in normal conversation, some unheard words can be inferred if they occur in particular, familiar contexts. Moreover, the vocabulary is often restricted, which also helps understanding.

Therefore, 95 percent intelligibility is satisfactory for most situations.

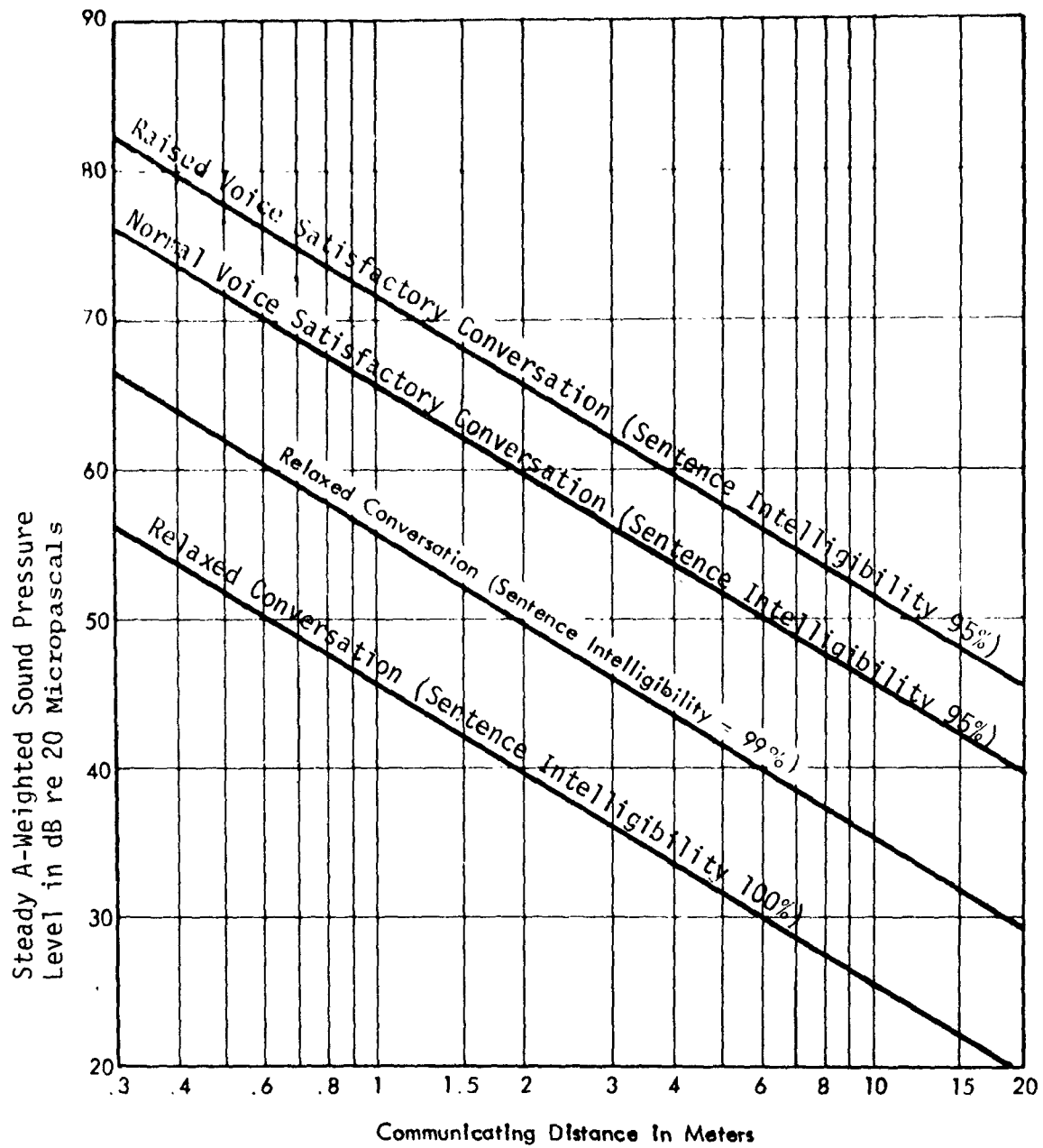


Figure D-2. Maximum Distances Outdoors Over Which Conversation is Considered to be Satisfactorily Intelligible in Steady Noise. D-1, D-2

The levels given in Figure D-2 for relaxed conversation permit 100% speech intelligibility when communicating in a normal voice. This situation represents an ideal environment for speech communication and is considered necessary for acceptable conversation in the indoor environment. However, it does not define the situation outdoors where 95% intelligibility is adequate, and communication outdoors generally takes place between people who are walking or standing relatively close together, about 1 to 2 meters. Moreover, these levels appear to be consistent with the need for speech privacy.

The data for normal and raised voice of Figure D-2 are tabulated for convenience below:

TABLE D-1

STEADY A-WEIGHTED NOISE LEVELS THAT ALLOW COMMUNICATION WITH
95 PERCENT SENTENCE INTELLIGIBILITY OVER VARIOUS DISTANCES
OUTDOORS FOR DIFFERENT VOICE LEVELS (Ref. D-2)

VOICE LEVEL	COMMUNICATION DISTANCE (meters)					
	0.5	1	2	3	4	5
Normal Voice (dB)	72	66	60	56	54	52
Raised Voice (dB)	78	72	66	62	60	58

If the noise levels in Figure D-2 and Table D-1 are exceeded, the speaker and listener must either move closer together or expect reduced intelligibility. For example, consider a conversation at a distance of 3 meters in a steady background noise of 56 dB using normal voice levels. If this background level is increased from 56 to 66 dB, the speakers will either need to move from 3 to 1 meter separation to maintain the same intelligibility, or alternatively, to raise their voices well above the raised-voice effort. If they remain 3 meters apart without raising their voices, the intelligibility would drop from 95 to 65 percent.

C. Speech Interference in the Presence of Fluctuating Sound Levels

The data in Figures D-1 and D-2 are based on tests involving steady, continuous sound. It might be questioned whether these results would apply to sounds which have fluctuating levels. For example, when intermittent noise intrusions, such as those from aircraft flyovers or truck passbys, are superimposed on a steady noise background, the equivalent sound level is greater than the level of the background alone. If the sound levels of Figures D-1 and D-2 are interpreted as equivalent sound levels, it could be argued that these values could be slightly increased (by an amount depending on the statistics of the noise), because most of the time the background noise level is actually lower than the equivalent sound level.

The amount of this difference has been calculated for the cases of urban noise and aircraft noise statistics shown in Figure D-3. The data in this figure ^{D-3} include a wide range of urban sites with different noise levels and an example of aircraft noise at a site near a major airport. In each case the speech intelligibility was calculated from the standard sentence intelligibility curve ^{D-4} for various values of L_{eq} , first with steady noise and then with the two specific fluctuating noises of Figure D-3. The calculation consisted of determining the incremental

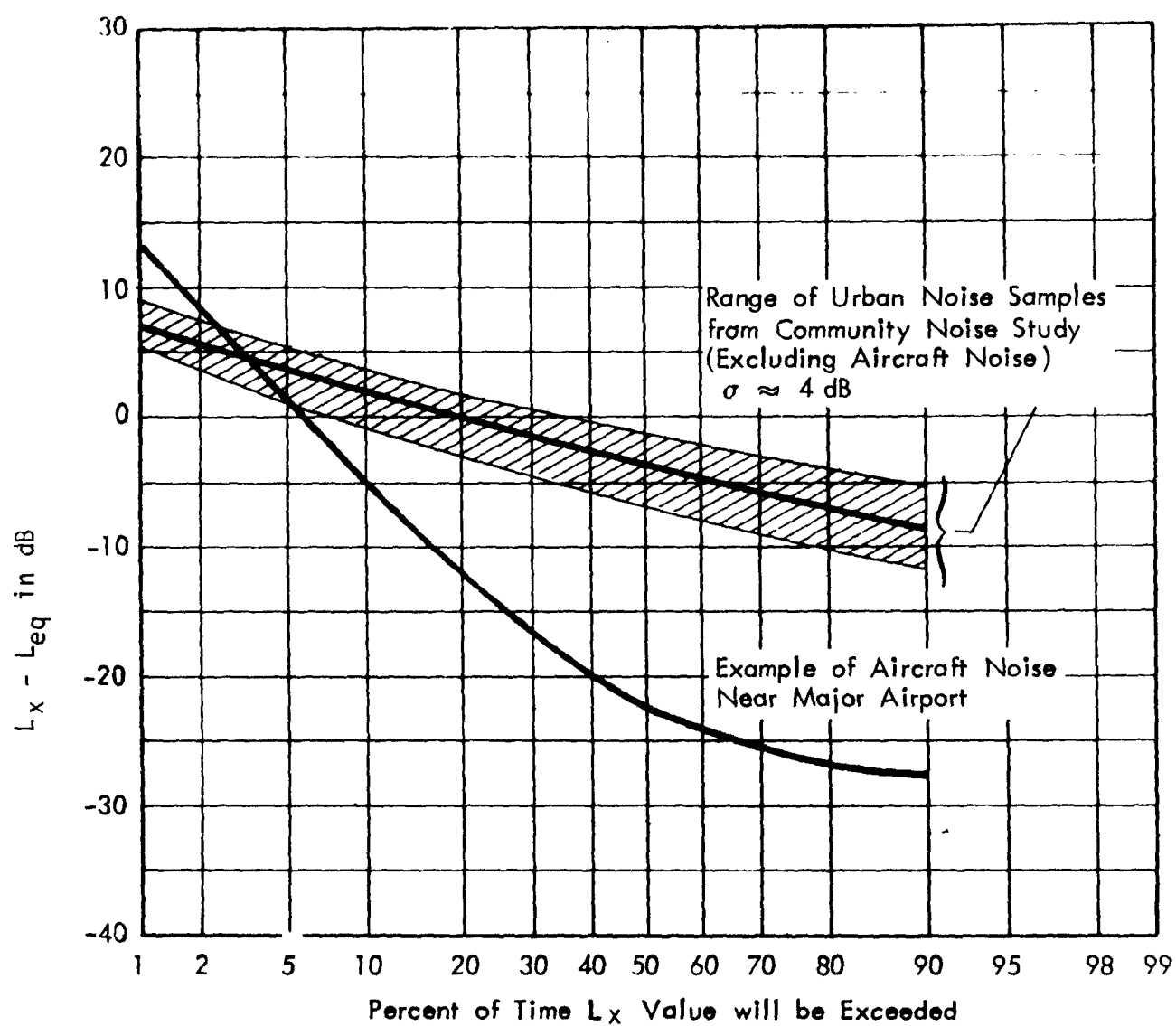


Figure D-3. Cumulative Distribution of Typical Community Noises During the Daytime Relative to the Equivalent Sound Level. D-39

contribution to sentence intelligibility for each level (at approximately 2 dB increments) and its associated percentage of time of occurrence. The incremental contributions were then summed to obtain the total value of intelligibility in each case.

The results, shown in Table D-2, demonstrate that, for 95 percent sentence intelligibility, normal vocal effort, and 2 meter separation between talker and listener outdoors, the maximum L_{eq} value associated with continuous noise is less than the maximum value for an environmental noise whose magnitude varies with time. It is therefore concluded that almost all time-varying environmental noises with the same L_{eq} would lead, averaged over long time periods, to better intelligibility than the intelligibility for the same L_{eq} values of continuous noise.

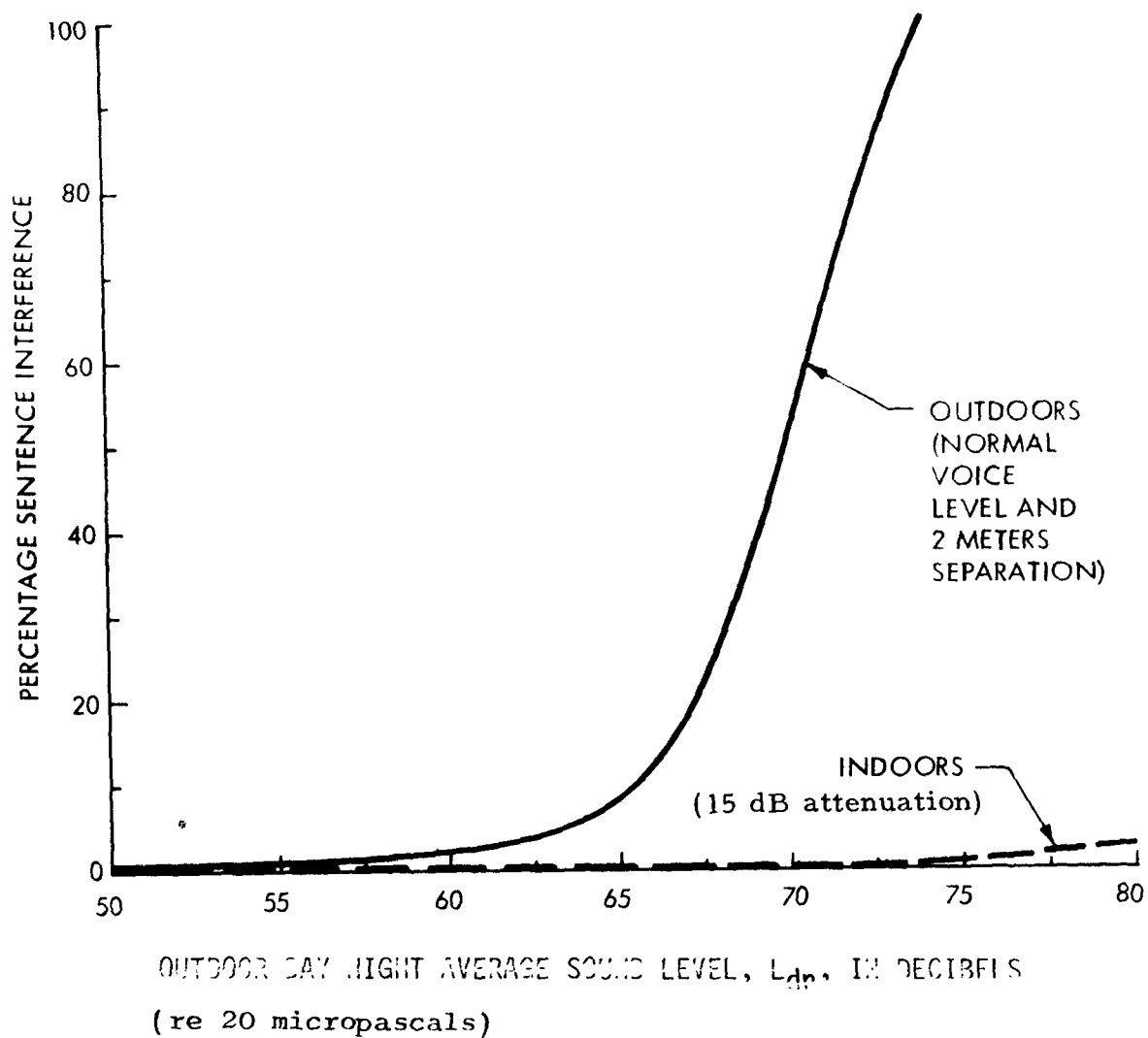
Alternatively, for a fixed L_{eq} value, the percentage of interference with speech (defined as 100 minus the percentage sentence intelligibility) is greater for steady noise than for almost all types of environmental noise whose magnitude varies with time. The relationship between L_{dn} and the maximum percentage sentence interference (i.e., for continuous noise) is given in Figure D-4.

Table D-2

MAXIMUM EQUIVALENT SOUND LEVELS THAT ALLOW 95 PERCENT
SENTENCE INTELLIGIBILITY AT A DISTANCE OF 2 METERS,
USING NORMAL VOICE EFFORT OUTDOORS
(REF: Figures D-2 and D-3)

Noise Type	L_{eq} in decibels
Steady	60
Urban Community Noise	60 +
Aircraft Noise	65

The extreme example of a fluctuating noise is a series of noise pulses of constant level that are of sufficient magnitude relative to the background to control the equivalent sound level. For example, there could be a case where the background noise during the off-cycle is assumed negligible, so that when the noise pulses are not present, the speech intelligibility is 100 percent. Table D-3 shows how the percentage interference with sentence intelligibility varies as a function of the level and on-time for a cycled steady noise whose level and duration are always adjusted to yield a fixed value for the equivalent sound level. Two situations are envisaged: indoors, relaxed conversation, $L_{eq} = 45$ dB, leading to 100 percent sentence intelligibility in the steady, continuous noise; and outdoors, normal voice effort at 2 meters separation, $L_{eq} = 60$ dB, leading to 95 percent sentence intelligibility in the steady, continuous noise.



NOTE: Percentage interference equals 100 minus percentage intelligibility, and L_{dn} is based on $L_d + 3$. D-39

Figure D-4. Maximum Percentage Interference with Sentences as a Function of the Day-Night Average Noise Level.

TABLE D-3

PERCENTAGE INTERFERENCE WITH SENTENCE INTELLIGIBILITY IN THE
 PRESENCE OF A STEADY INTRUDING NOISE CYCLED ON AND OFF
 PERIODICALLY IN SUCH A WAY AS TO MAINTAIN
 CONSTANT EQUIVALENT SOUND LEVEL, AS A FUNCTION OF THE
 MAXIMUM NOISE LEVEL AND DURATION^{D-39}
 (Assumes 100% intelligibility during the off-cycle)

Situation	A-Weighted level of in- truding noise during "on-cycle," decibels	Duration of intru- ding noise as per- cent of total time	Percent inter- ference if intru- ding noise were con- tinuous	Average percent interfer- ence in cycled noise
<u>INDOORS</u>				
Relaxed conversa- tion, background	45	100	0	0
	50	32	0.5	0.16
$L_{eq} = 45$ dB,	55	10	1	0.10
100% intelligibility	60	3	2	0.06
if background	65	1	6	0.06
noise were	70	0.3	40	0.12
continuous at 45 dB	75	0.1	100	0.10
	80	0.03	100	0.03
<u>OUTDOORS</u>				
Normal voice at 2	60	100	5	5.0
meters, background	65	32	7.7	2.5
$L_{eq} = 60$ dB,	70	10	53	5.3
95% intelligibility	75	3	100	3.0
if background	80	1	100	1.0
noise were continuous at 60 dB				

(REF: Task Group #3 Report)

The combination of level in the first column and duration in the second column are such as to maintain constant L_{eq} for each situation, 45 dB indoors and 60 dB outdoors. The third column gives the percent interference with sentence intelligibility that would apply if the noise were steady and continuous with the level indicated in column 1. The fourth column gives the percent interference for the cycled noise in each case.

The results for this extreme case indicate that no matter how extreme the noise fluctuation for the indoor case, on the average there is negligible speech interference for $L_{eq} = 45$ dB. On the other hand, with $L_{eq} = 60$ dB outdoors, the average speech interference tends to decrease as the fluctuations of the noise become more extreme. However, it should be recognized that if the duration of the intruding noise were to take place in one continuous period, and if its percentage interference (column 3) were equal to 100, then it would blot out all communication for the duration of its "on-cycle".

The following sections relating to activity interference, annoyance, and community reaction utilize equivalent sound level with a nighttime weighting (L_{dn}) which is discussed more fully in Appendix A. However, for the speech interference effects of noise, a similar measure without the nighttime weighting (L_{eq}) has been employed. To allow comparison between the various effects stated above, some relationships are necessary to allow at least approximate

conversion from L_{eq} to L_{dn} . For indoor levels such as those described in Appendix A for various lifestyles, levels during the day are at least 10 dB higher than those during the night. Thus L_{eq} is virtually the same as L_{dn} for normal indoor situations.

For an outdoor L_{dn} of 55 dB or less, day time levels (L_d) are generally 8 dB higher than the nighttime levels (L_n). For this situation, L_{dn} is still quite close to L_{eq} during the day. The correction is less than one dB. For levels greater than L_{dn} 65 dB, the nighttime levels are generally only 4 dB less than during the day time. For these cases, L_{dn} is 3 dB higher than L_{eq} during the day.

For values of L_{dn} between 55 and 65, further interpolation is necessary using Figure A-7.

II. Activity Interference

Activity interference due to noise is not new. The recent EPA document concerning public health and welfare criteria for noise ^{D-5} mentions an ordinance enacted 2500 years ago by the ancient Greek community of Sybaris, banning metal works and the keeping of roosters within the city to protect against noise that interfered with speech and might disturb sleep. History contains other examples indicating speech and sleep interference due to various types of noises, ranging from wagon noise to the noise of blacksmiths.

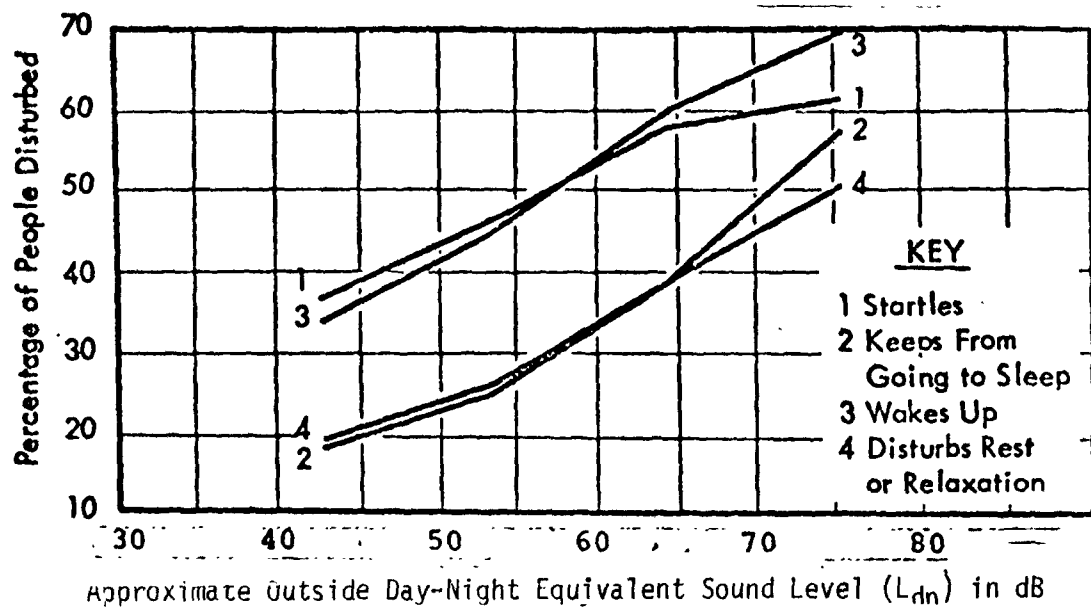


Figure D-5. Percentage of People Disturbed by Aircraft Noise for Various Types of Reasons Concerned With Rest and Sleep D-6

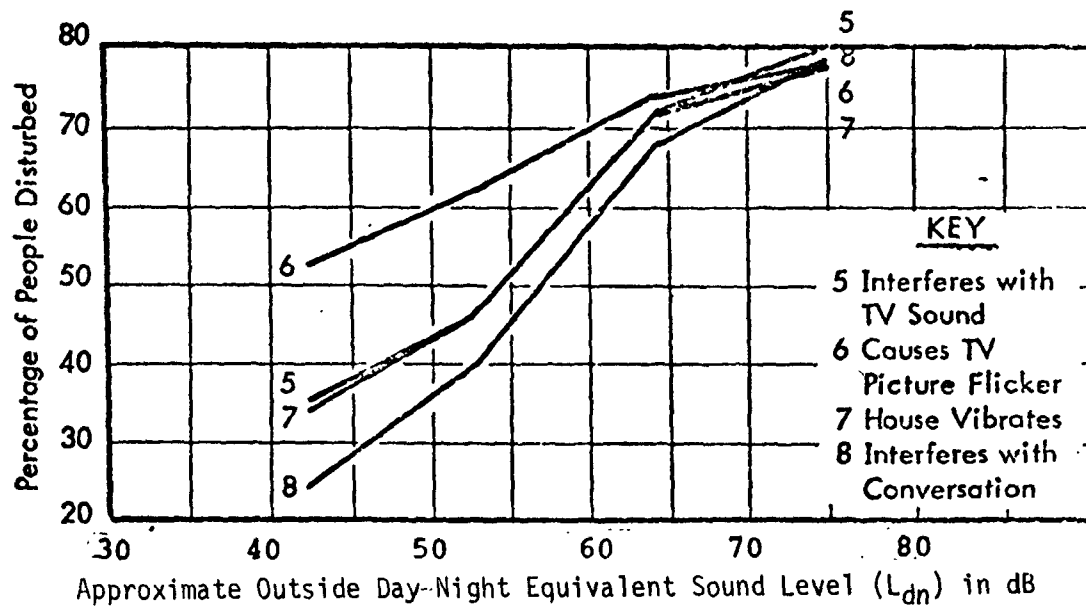


Figure D-6. Percentage of People Disturbed by Aircraft Noise for Various Types of Reasons Concerned With Domestic Factors D-6

More recently, surveys have been conducted which further demonstrate that noise does interfere with various types of activity. For example, Figures D-5 and D-6, based on research done in England, give activity interference reported by the people who were disturbed by aircraft noise for various types of activities as a function of the approximate L_{dn} associated with noise from aircraft flyovers ^{D-14} (for explanation of the term L_{dn} see Appendix A). Thus, for an outside L_{dn} of approximately 55 dB, over 50% of the people who were disturbed reported some interference with TV sound, and 45% reported some interference with conversation. At the same level, about 45% reported that noise occasionally woke them up, while 30% claimed it sometimes disturbed their relaxation. The figures also indicate that at higher noise levels, greater percentages of people who were disturbed have reported activity interference.

Later research in the USA ^{D-7} provides the information on activity interference shown in Table D-4. This table gives the activity disturbance percentages of those who reported that they were extremely disturbed by the noise, which accounts in part for the low percentage values. It was reported that the daily activities of 98.6% of those questioned (about 4000 people) were disrupted one or more times by aircraft noise. More activities are mentioned in Table D-4 than in the previous tables. For example, telephone use, reading, listening to tapes and records, and eating were reported to have been disturbed by noise.

TABLE D-4

PERCENT OF THOSE PEOPLE WHO WERE EXTREMELY DISTURBED
BY AIRCRAFT NOISE*, BY ACTIVITY DISTURBED D-7

<u>Activity</u>	<u>Percent</u>
TV/Radio reception	20.6
Conversation	14.5
Telephone	13.8
Relaxing outside	12.5
Relaxing inside	10.7
Listening to records/tapes	9.1
Sleep	7.7
Reading	6.3
Eating	3.5

*Percent scoring 4 or 5 on a 1-5 scale.

A study performed in the Netherlands^{D-8} gives further evidence that activity interference is associated with noise (see Table D-5). The data were taken in the urban/suburban areas in the vicinity of the Amsterdam Airport where the L_{dn} ranged from 45 to 85 dB. Activity interference is shown by percentage of people interviewed who have been frequently or sometimes disrupted in various activities. Also reported are the estimated tolerance limits for various portions of the exposed population. Thus, in an area where noise produces "predominantly moderate nuisance," the "tolerance limit" is reached for one-third of the population. Thirty-one percent report being sometimes disturbed by noise during conversation, and 21% report being sometimes disturbed by noise during sleep; occupational disturbance was reported by 12%. (The judgment of "admissibility" with respect to well-being in Table D-5 is the result of the referenced study and not a conclusion of this report.)

A recent study^{D-9} in the USA found that 46% of the 1200 respondents were annoyed by surface vehicle noise at some time. Activities which were reported disturbed are indicated by percentages shown in Table D-6. Here we see that sleeping is the activity most disturbed by surface vehicle noise, followed in order by listening to TV, radio or recordings; mental activity, such as reading, writing or thinking; driving; conversing; resting and walking.

From the studies reported here, it is clear that noise does indeed interfere with various activities in our everyday lives. Unfortunately, most of the studies do not provide activity interference as a function of noise exposure. However, the activity which is most sensitive to noise in most of the studies is speech communication (including listening to TV), which can be directly related to the level of the intruding noise.

TABLE D-5

Percentage OF PERSONS INTERROGATED WHO FEEL THAT THEY HAVE FREQUENTLY,
 or Sometimes, (S) BEEN DISTURBED IN CONVERSATION, RADIO LISTENING,
 OCCUPATIONS, SLEEP; FEEL AFRAID, AND OF PERSONS IN WHOSE
 OCCASIONS ON THESE OCCASIONS THE HOUSE VIBRATES. AT MEAN VALUE OF
 D-8
 SANCE SCORES.

Mean nuisance score	Disturbance of conversation		Disturb. of radio listening		Disturb. of tele- vision		Disturb.of occupations		Afraid
	F *	S*	F	S	F	S	F	S	YES
0	0	0	0	0	0	0	0	0	0
1	7	12	2	4	6	10	1	3	25
2	16	24	5	8	12	18	3	7	48
3	27	31	10	15	20	23	7	12	66
4	39	35	18	22	31	25	11	19	76
5	56	37	27	30	42	26	19	28	91
6	67	31	38	36	57	26	34	39	94
7	83	17	56	44	72	28	55	45	100

* F denotes "frequently" S denotes "sometimes"

TABLE D-5 (Continued)

House Vibra. Yes	Disturb. of Sleep		Nuisance Felt Subjectively	Admissibility from point of view of physical, mental and social well being, in regard to which the stress is laid on disturbance of sleep, disturbance of conversation and feeling afraid.
	P	S		
0	0	0	No nuisance	-----
21	3	7	Slight nuisance	Admissible
41	6	14	Slight to moderate nuisance	Admissible; the tolerance limit is reached for about one-fifth of the population.
56	12	21	Predominantly moderate nuisance	Limit of admissibility; the tolerance limit is reached for about one-third of the population.
72	20	28	Predominantly serious nuisance	Inadmissible; the tolerance limit is exceeded for about half of the population
83	31	33	Serious nuisance	Inadmissible; the tolerance limit is exceeded for about two-thirds of the population.
92	44	42	Intolerable	Absolutely inadmissible
100	72	28	Intolerable	Absolutely inadmissible

TABLE D-6

ACTIVITIES OF RESPONDENTS DISTURBED BY SURFACE VEHICLE NOISE
 (All Situations: Respondent's Usual Activity) D-9

Category	No. of Situations	Percentage of total Situations
Driving	47	7
Walking	16	2
Talking with people present	42	6
Working at home	12	2
Reading, writing, thinking	30	12
Sleeping	155	22
Other	13	2
Not relevant	179	26
Listening to TV, radio, records	92	13
Resting (awake)	35	5
Not ascertained	22	3
Total	693	100

3. Community Reaction to Environmental Noise

There are two methods of indirectly assessing the cumulative effects of environmental noise on people. These are examining the reactions of individuals or groups of individuals to specific intruding noises, either (a) with respect to actions taken (complaints, suits, etc.), or (b) in terms of responses made to social survey questionnaires. The first category, involving overt action by individuals or groups, is summarized in this section, and key data regarding the second category, involving responses indicating annoyance, is summarized in the next section.

In the last 25 years, many new types of noise sources have been introduced into suburban and urban residential communities. These sources, such as jet aircraft, urban freeways, new industrial plants, and homeowner equipment, have created numerous community problems with environmental noise. These problems have provided significant data and insight relating to community reaction and annoyance and stimulated the development of several indices for measurement of the magnitude of intruding noises.

Various U.S. Governmental agencies began to investigate the relationships between aircraft noise and its effect on people in communities in the early 1950's. This early research resulted in the proposal of a model by Bolt, Rosenblith and Stevens^{D-10} for relating aircraft noise intrusion and the probable community reaction. This

model, first published by the Air Force, accounted for the following seven factors:

1. Magnitude of the noise with a frequency weighting relating to human response.
2. Duration of the intruding noise.
3. Time of year (windows open or closed).
4. Time of day noise occurs.
5. Outdoor noise level in community when the intruding noise is not present.
6. History of prior exposure to the noise source and attitude toward its owner.
7. Existence of pure-tone or impulsive character in the noise.

Correction for these factors were initially made in 5 dB intervals since the magnitudes of many of the corrections were based solely on the intuition of the authors, and it was considered difficult to assess the response to any greater degree of accuracy.^{D11-13} This model was incorporated in the first Air Force Land Use Planning Guide^{D-14} in 1957 and was later simplified for ease of application by the Air Force and the Federal Aviation Administration.

Recently the day-night sound level has been derived for a series of 55 community noise problems^{D-3} to relate the normalized measured L_{dn} with the observed community reaction. The normalization procedure followed the Bolt, Rosenblith and Stevens method with a few minor modifications. The correction factors which were added to the measured L_{dn} to obtain the normalized L_{dn} are given in Table D-7.

Table D-7

CORRECTIONS TO BE ADDED TO THE MEASURED DAY-NIGHT SOUND LEVEL (L_{dn})
OF INTRUDING NOISE TO OBTAIN NORMALIZED L_{dn}

Type of Correction	Description	Amount of Correction to be Added to Measured L_{dn} in dB
Seasonal Correction	Summer (or year-round operation)	0
	Winter only (or windows always closed)	-5
Correction for Out-door Noise Level	Quiet suburban or rural community (remote from large cities and from industrial activity and trucking)	+10
Measured in Absence of Intruding Noise	Normal suburban community (not located near industrial activity)	+5
	Urban residential community (not immediately adjacent to heavily traveled roads and industrial areas)	0
	Noisy urban residential community (near relatively busy roads or industrial areas)	-5
	Very noisy urban residential community	-10
Correction for Previous Exposure & Community Attitudes	No prior experience with the intruding noise	+5
	Community has had some previous exposure to intruding noise but little effort is being made to control the noise. This correction may also be applied in a situation where the community has not been exposed to the noise previously, but the people are aware that bona fide efforts are being made to control the noise.	0
	Community has had considerable previous exposure to the intruding noise and the noise maker's relations with the community are good	-5
	Community aware that operation causing noise is very necessary and it will not continue indefinitely. This correction can be applied for an operation of limited duration and under emergency circumstances.	-10
Pure Tone or Impulse	No pure tone or impulsive character	0
	Pure tone or impulsive character present	+5

The distribution of the cases among the various noise sources having impact on the community are listed in Table D-8. The results are summarized in Figure D-7.

The "no reaction" response in Figure D-7 corresponds to a normalized outdoor day-night sound level which ranges between 50 and 61 dB with a mean of 55 dB. This mean value is 5 dB below the value that was utilized for categorizing the day-night sound level for a "residential urban community," which is the baseline category for the data in the figure. Consequently, from these results, it appears that no community reaction to an intruding noise is expected, on the average, when the normalized day-night sound level of an identifiable intruding noise is approximately 5 dB less than the day-night sound level that exists in the absence of the identifiable intruding noise. This conclusion is not surprising; it simply suggests that people tend to judge the magnitude of an intrusion with reference to the noise environment that exists without the presence of the intruding noise source.

The data in Figure D-7 indicate that widespread complaints may be expected when the normalized value of the outdoor day-night sound level of the intruding noise exceeds that existing without the intruding noise by approximately 5 dB, and vigorous community reaction may be expected when the excess approaches 20 dB. The standard deviation of these data is 3.3 dB about their means and an envelope of

+5 dB encloses approximately 90 percent of the cases. Hence, this relationship between the normalized outdoor day-night sound level and community reaction appears to be a reasonably accurate and useful tool in assessing the probable reaction of a community to an intruding noise and in obtaining one type of measure of the impact of an intruding noise on a community.

Table D-8

NUMBER OF COMMUNITY NOISE REACTION CASES AS A FUNCTION
OF NOISE SOURCE TYPE AND REACTION CATEGORY

Type of Source	Community Reaction Categories			Total Cases
	Vigorous Threats of Legal Action	Wide Spread Complaints	No Reaction or Sporadic Complaints	
Transportation vehicles, including:				
Aircraft operations	6	2	4	12
Local traffic			3	3
Freeway	1			1
Rail		1		1
Auto race track	2			2
Total Transportation	9	3	7	19
Other single-event or intermittent operations, including circuit breaker testing, target shooting, rocket testing and body shop	5			
Steady state neighborhood sources, including transformer substations, residential air conditioning	1	4	2	7
Steady state industrial operations, including blowers, general manufacturing, chemical, oil refineries, et cetera	7	7	10	24
Total Cases	22	14	19	55

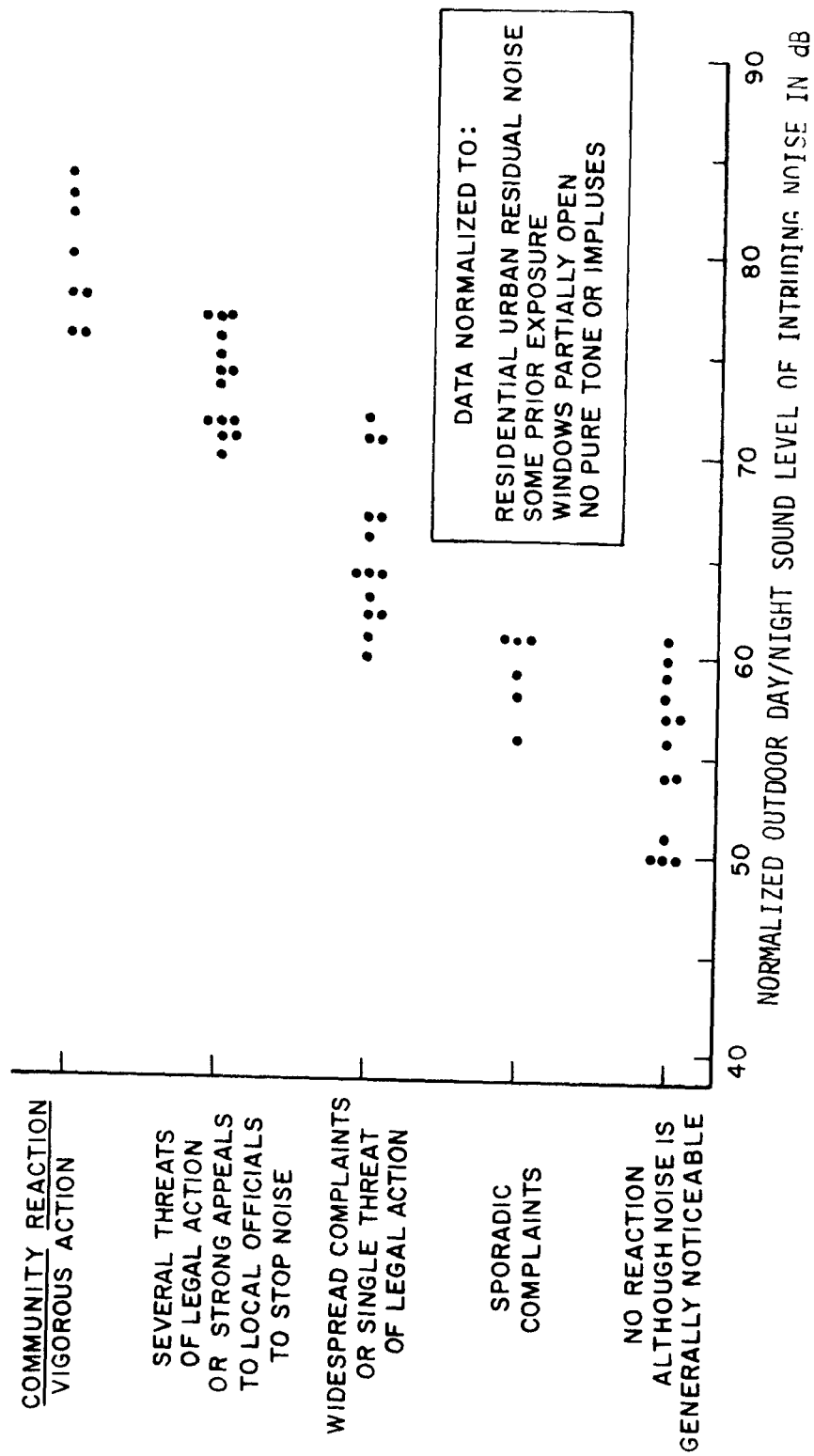


Figure D-7. Community Reaction to Intensive Noises of Many Types as a Function of the Normalized Outdoor Day Night Sound Level of the Intruding Noise D-3

The methodology applied to arrive at the correlation between normalized L_{dn} and community complaint behavior illustrated in Figure D-7 is probably the best available at present to predict the most likely community reaction in the U.S. Unfortunately, readiness to complain and to take action is not necessarily an early indicator of interference with activities and annoyance that the noise creates. The fact that correction for the normal background noise level without intruding noise results in better correlation of the data points might be interpreted to mean that urban communities have adapted to somewhat higher residual noise levels that are not perceived as interfering or annoying. On the other hand, it is more likely that the higher threshold for complaining is caused by the feeling that higher residual noise is unavoidable in an urban community and that complaining about "normal" noise would be useless. For the present analysis, it might therefore be more useful to look at the same data without any corrections for background noise, attitude, and other subjective attributes of the intruding noise. Figure D-8 gives these data for the same 55 cases.

The increase in spread of the data is apparent in comparing Figures D-7 and D-8, and the standard deviation of the data about the mean value for each reaction is increased from 3.3 dB for the normalized data to 7.9 dB. The mean value of the outdoor day-night sound level associated with "no reaction" is 55 dB; with vigorous reaction, 72 dB; and, for the three intermediate degrees of reaction, 62 dB.

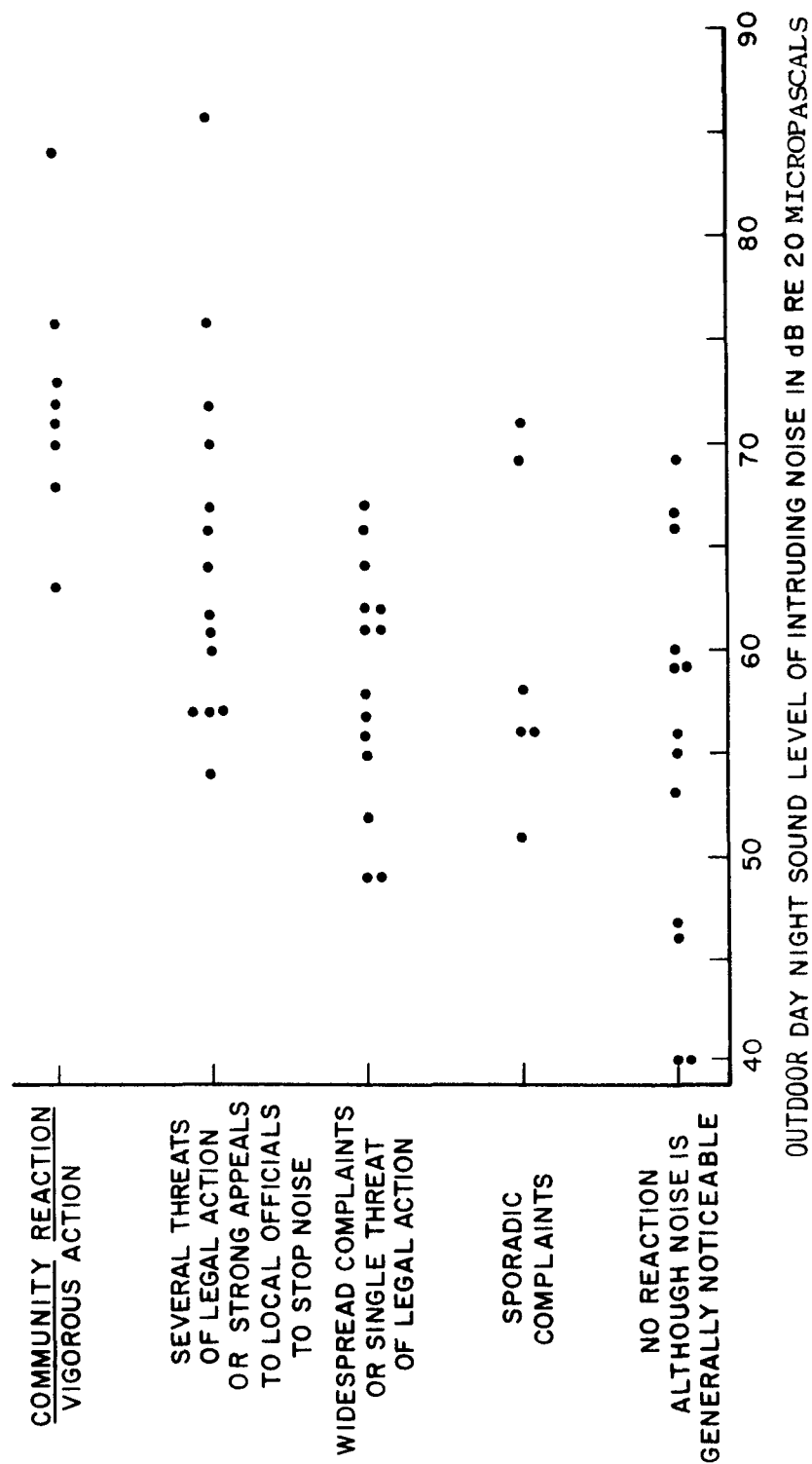


Figure D-8. Community Reaction to Intensive noises of Many Types As A Function of the Outdoor Day/Night Sound Level of the Intruding Noise D-3

There is no evidence in these 55 cases of even sporadic complaints if the L_{dn} is less than 50 dB.

4. Annoyance

Annoyance discussed in this report is limited to the long-term integrated adverse responses of people to environmental noise. Studies of annoyance in this context are largely based on the results of sociological surveys. Such surveys have been conducted among residents of a number of countries including the United States. D-6, D-7, D-15, D-16

The short-term annoyance reaction to individual noise events, which can be studied in the field as well as in the laboratory, is not explicitly considered, since only the accumulating effects of repeated annoyance by environmental stimuli can lead to environmental effects on public health and welfare. Although it is known that the long-term annoyance reaction to a certain environment can be influenced to some extent by the experience of recent individual annoying events, the sociological surveys are designed to reflect, as much as possible, the integrated response to living in a certain environment and not the response to isolated events.

The results of sociological surveys are generally stated in terms of the percentage of respondents expressing differing degrees of disturbance or dissatisfaction due to the noisiness of their environments. Some of the surveys go into a complex procedure to construct a scale of annoyance. Others report responses to the direct question of "how annoying

is the noise?" Each social survey is related to some kind of measurement of the noise levels (mostly from aircraft operations) to which the survey respondents are exposed, enabling correlation between annoyance and outdoor noise levels in residential areas.

The results of social surveys show that individual responses vary widely for the same noise level. Borsky ^{D-17} has shown that these variances are reduced substantially when groups of individuals having similar attitudes about "fear" of aircraft crashes and "misfeasance" of authorities are considered. Moreover, by averaging responses over entire surveys, almost identical functional relationships between human response and noise levels are obtained for the whole surveyed population as are obtained for the groups of individuals having neutral attitudinal responses. Therefore, in deriving a generalized relationship between reported annoyance and day-night sound level, it seems reasonable to use the average overall group responses, recognizing that individuals may vary considerably from the average, both positively and negatively depending upon their particular attitudinal biases. In most cases, the average group response can also be interpreted as the average individual's response during his life period. That is to say, each individual changes his attitudinal biases according to various factors and personal experiences not necessarily connected to the noise or even to the environment in general, which lead to fluctuations of each individual's attitude. The average group response does, to some extent, express the individual's response averaged over longer periods of his life. Therefore, this response reflects the effects most likely to affect his health over a longer time period.

A comparison of the results of three of the most prominent social surveys around airports are presented in the following paragraphs. These are the first and second surveys around London's Heathrow Airport, ^{D-6, D-15} and the Tracor study ^{D-7} around eight major airports in the United States. The noise level data reported for each survey were converted to outdoor day-night sound levels for the purpose of this analysis. In addition, data are presented from a survey of response to motor vehicles in U.S. urban areas. ^{D-18}

A. First London-Heathrow Survey

The first survey of about 2,000 residents in the vicinity of Heathrow airport was conducted in 1961 and reported in 1963. ^{D-6} The survey was conducted to obtain responses of residents exposed to a wide range of aircraft flyover noise. A number of questions were used in the interviews to derive measures of degrees of reported annoyance. Two results of this survey are considered here.

A general summary of the data, aggregating all responses on a category scale of annoyance ranging from "not at all" to "very much annoying," is plotted as a function of approximate L_{dn} in Figure D-9. This figure presents a relationship between word descriptors and day-night sound level.

Among the respondents in every noise level category, a certain percentage were classified in the "highly annoyed" category. This percentage of each group is plotted as a function of approximate L_{dn} on Figure D-10.

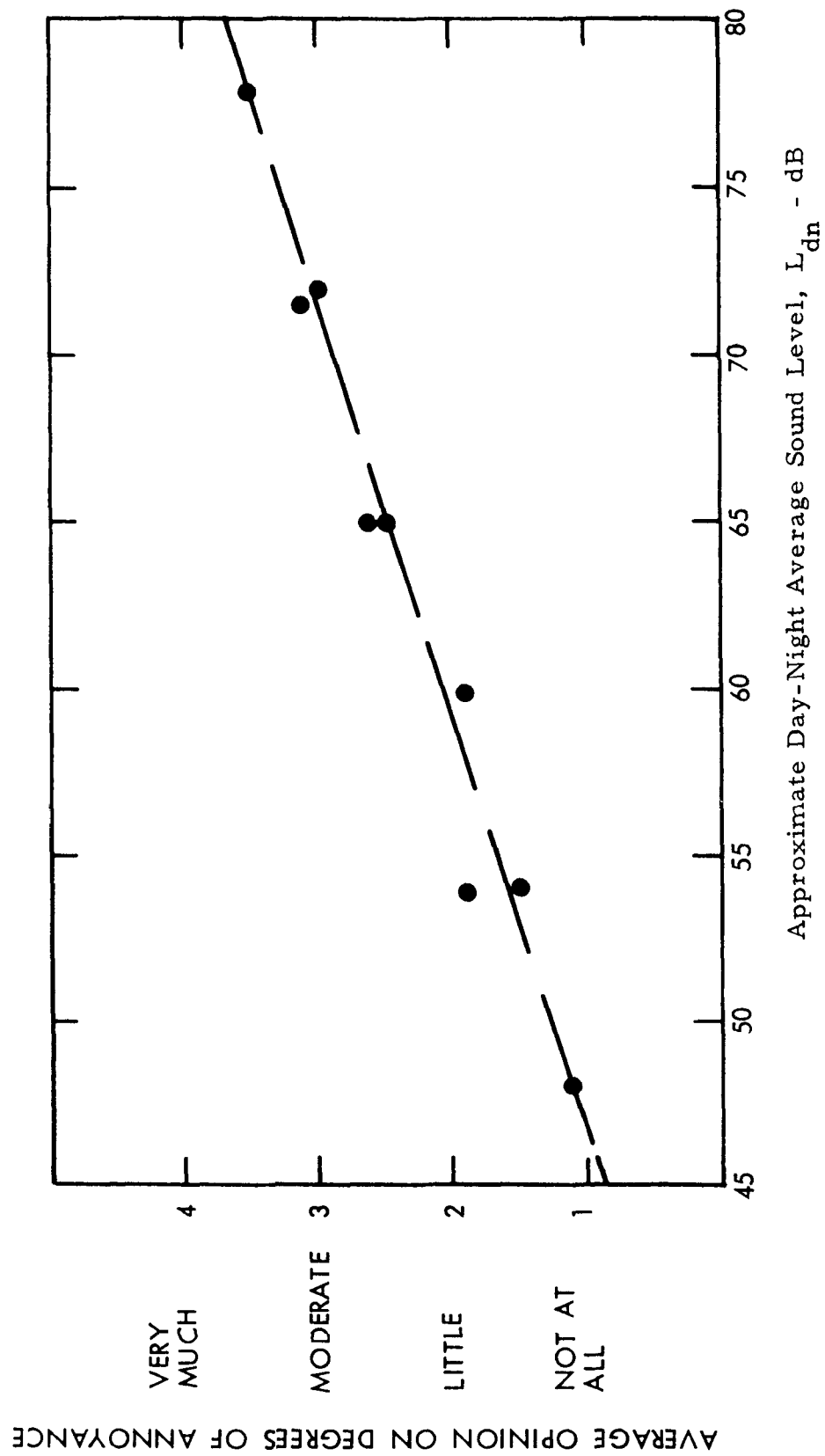


Figure D-9. Average Degree of Annoyance as a Function of the Approximate Day-Night Noise Level-Results of First London Heathrow Survey D-39 from D-6

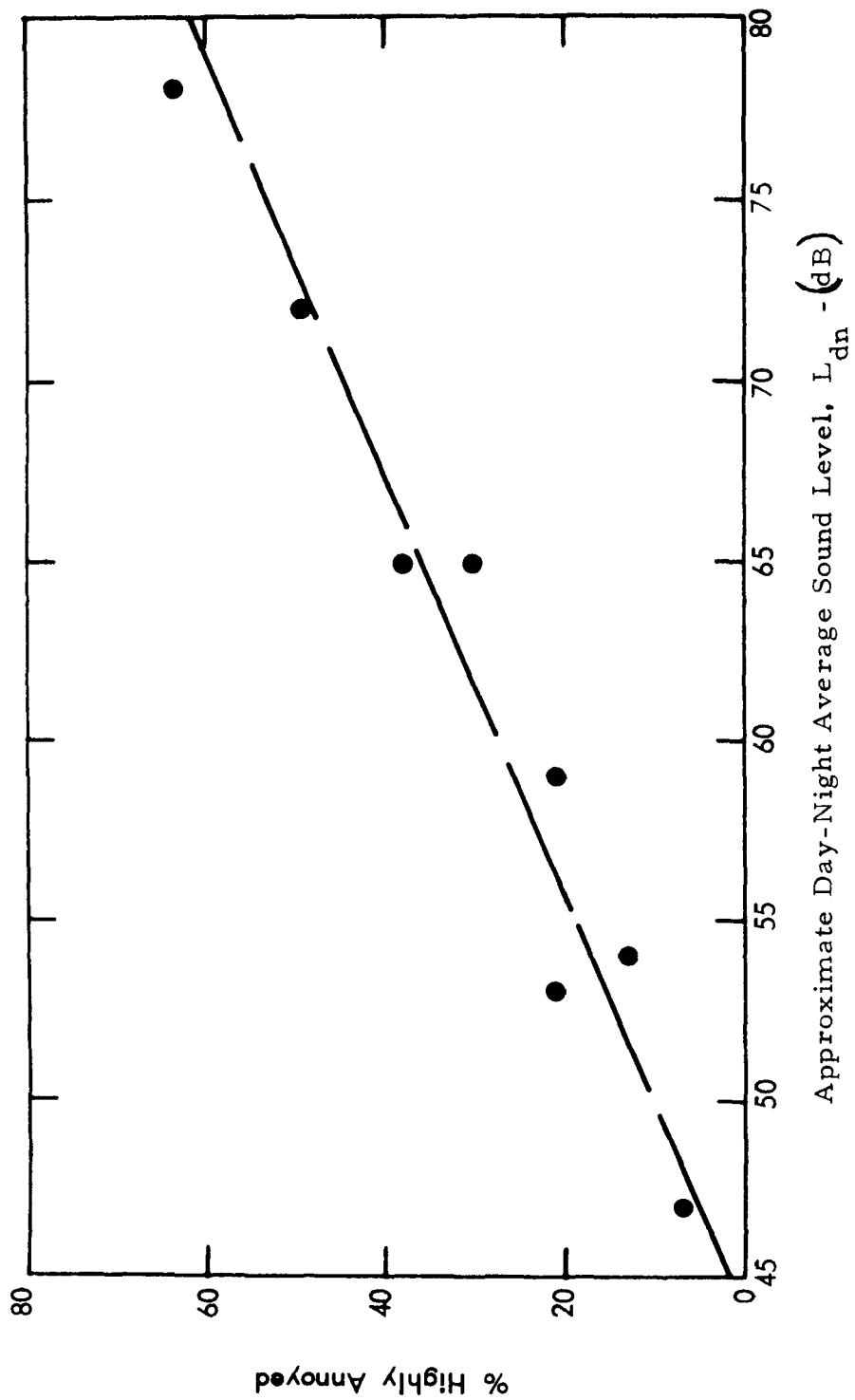


Figure D-10. Percentage Highly Annoyed as Function of Approximate Day-Night Noise Level -
Results of First London Heathrow Survey D-39 from D-6

Comparison of the data on the two figures reveals that, while the average over the population would fit a word classification of "little annoyed" at an L_{dn} value of approximately 60 dB, more than 20% of the population would still be highly annoyed at this L_{dn} value.

In addition to the derivation of overall annoyance scales, this study examined the attitude of the people towards their area and their desire to move as a function of both noise level and several other factors. The results are summarized in Figs. D-11 and D-12. They indicate that when the approximate L_{dn} exceeded 66-68 dB, aircraft noise became the reason most often cited by those who either "liked their area less now than in the past" or "wanted to move". Further, the data indicate that aircraft noise was of little importance, compared to other environmental factors, when the approximate L_{dn} was below 53 dB and was of average importance as a factor when the approximate L_{dn} was 60 dB.

B. Results of Second London Survey and Tracor Surveys

In 1967, a second survey^{D-15} was taken around Heathrow Airport in the same general area as the first survey. While refinements were attempted over the first survey, the results were generally the same. In 1971, the results of an intensive three year program under NASA sponsorship which studies eight air carrier airports in the United States were reported by Tracor.^{D-7} Since each of these efforts is discussed in detail in the references,

only an analysis of their combined results is considered here. Borsky^{D-17} used the data from these studies to correlate annoyance with noise exposure level for people having different attitudinal characteristics and different degrees of annoyance.

Utilizing Borsky's data for "moderate" responses to the attitudes of "fear" and "misfeasance", the relationship between percent highly annoyed and noise exposure level is plotted on Figure D-13. Again, noise levels have been converted to approximate L_{dn} values. It is worth noting that more than 7500 respondents are included in the data sets from which the computations were derived.

The comparison between the results shown on Figures D-10 and D-13 is striking in the near identity of the two regression lines--indistinguishable at any reasonable level of statistical confidence. The importance of these two sets of data lies in the stability of the results even though the data were acquired 6 to 9 years apart, at nine different airports in two different countries. This complete agreement led to the proposal of an average curve for the nominal relationship between sound level and percentage of people annoyed, which has been coordinated among and used by various U.S. Government agencies;^{D-19} applied in the studies of ICAO's coordinating committee on aircraft noise; and verified by a recent analysis of British, French and Dutch survey results conducted by the Organization for Economic Cooperation and Development (OECD).^{D-20} According to the OECD work,

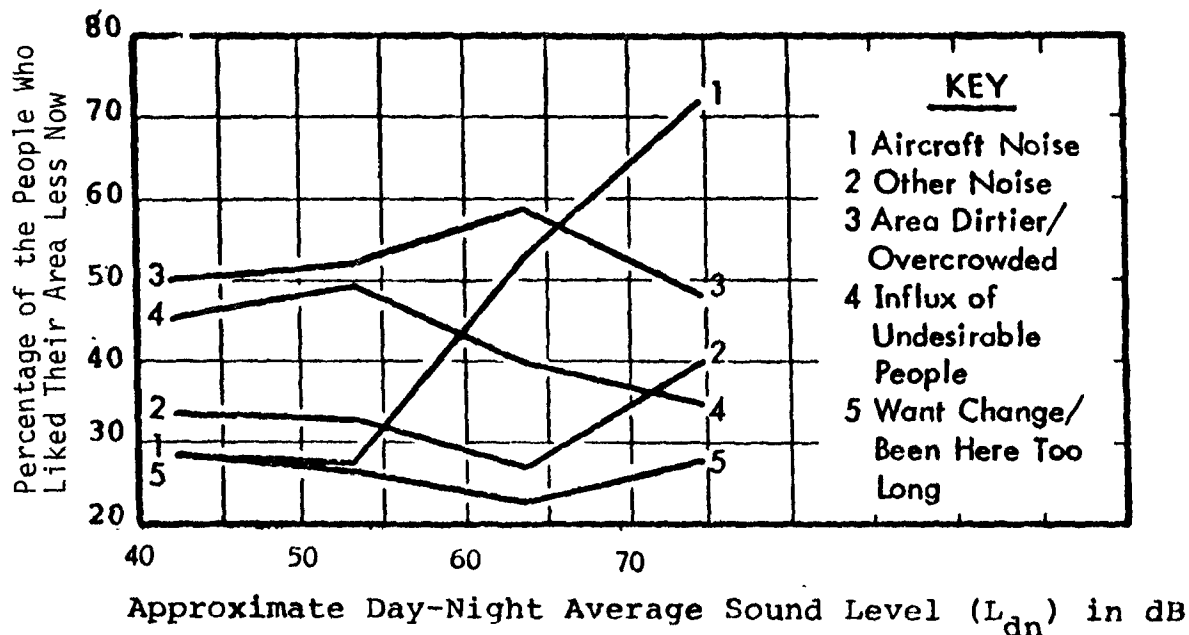


Figure D-11. Percentage of People Liking Their Area Less Now than in the Past for Various Reasons D-6

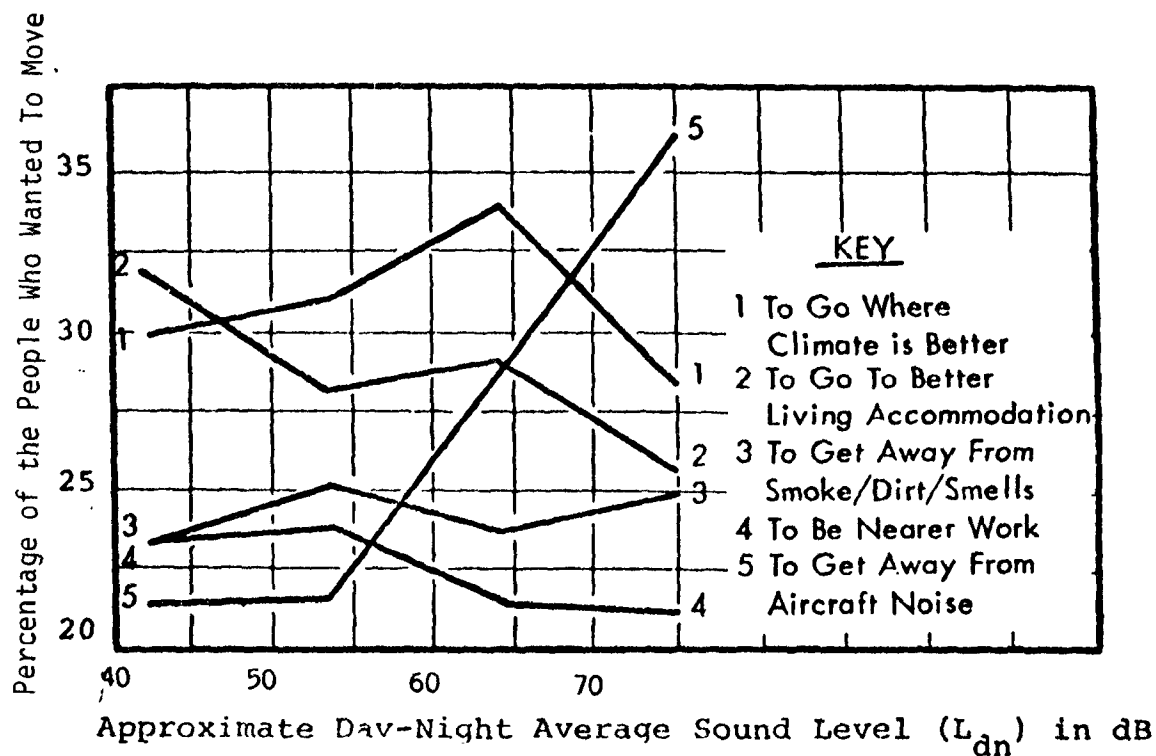


Figure D-12. Percentage of People Giving Particular Reasons for Wanting to Move D-6

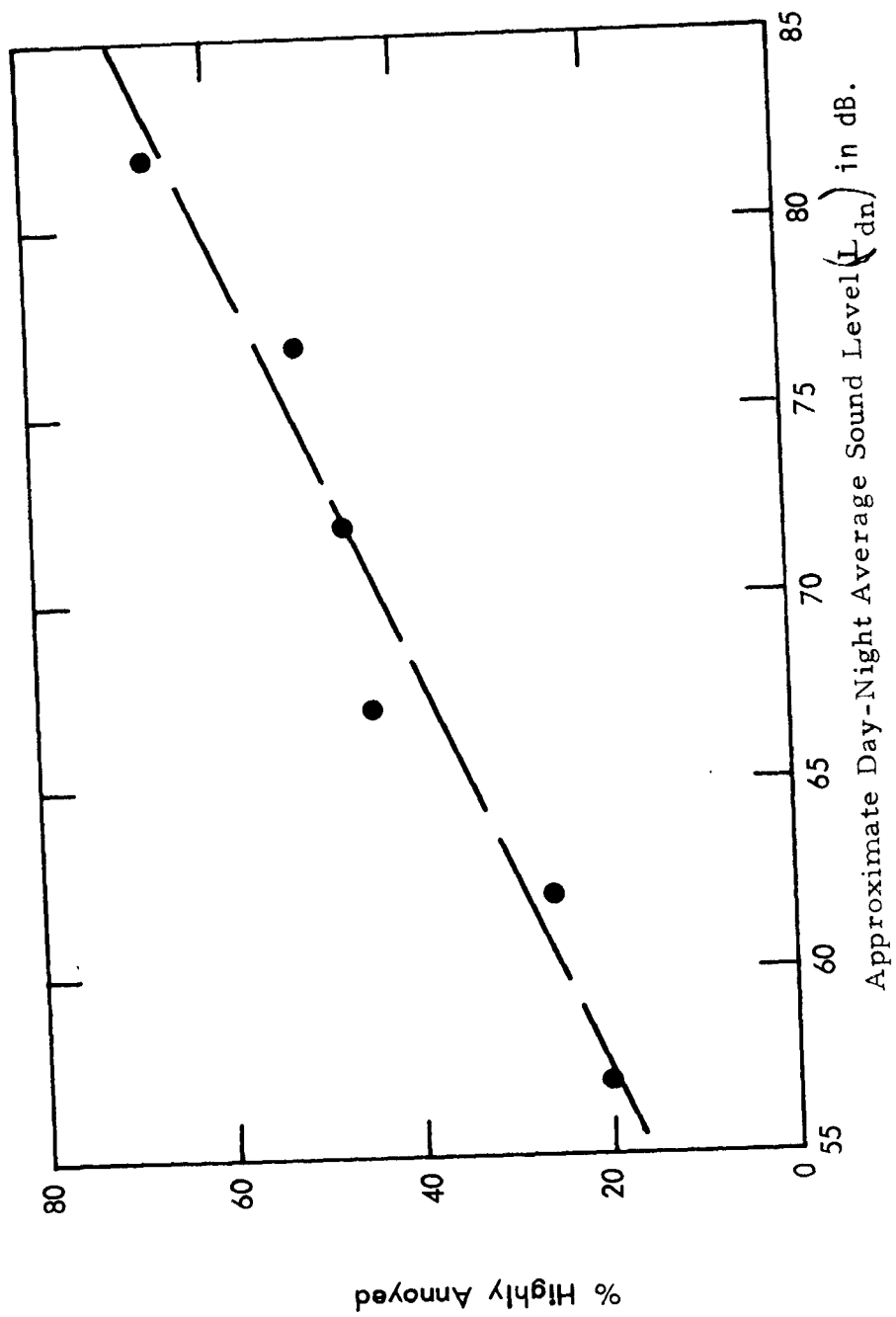


Figure D-13. Combined Results - British and U.S. Surveys D-11

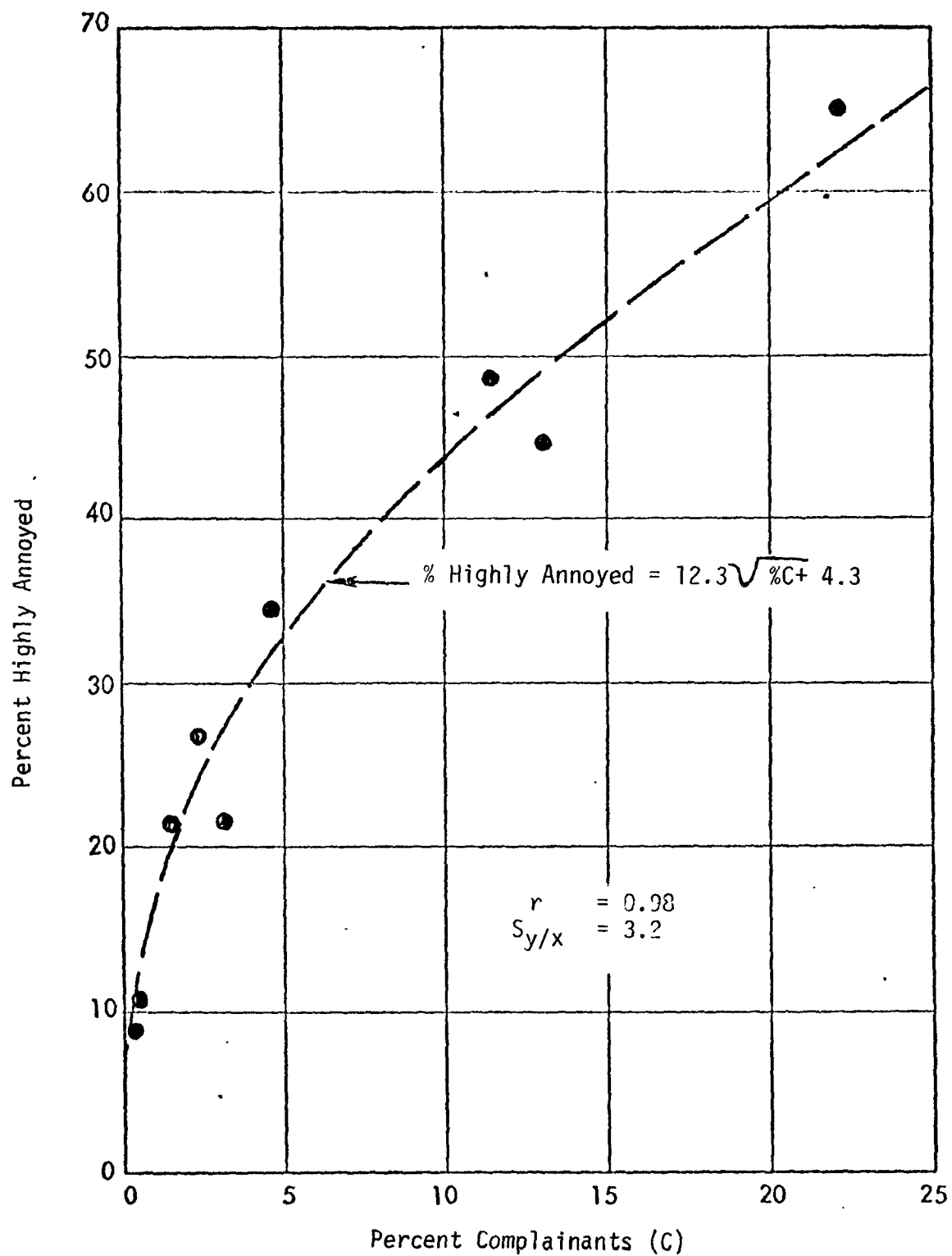


Figure D-14. Percentage of Highly Annoyed As A Function of Percent Complainants - D-7

the percentage of annoyed people can be predicted as follows:

Percentage of annoyed people = $2 (L_{dn} - 50)$.

The results of the Tracor Study^{D-7} also give a relationship between the number of people who indicate in a social survey that they are highly annoyed and the number of people who indicate that they have ever complained about the noise to any one in authority. The results, presented in Figure D-14, indicate that when 1% of the people complain, 17% report being highly annoyed; and when 10% of the people complain, 43% are highly annoyed.

C. Judgement of Noisiness at Urban Residential Sites

In 1972, a study of urban noise was conducted primarily to evaluate motor vehicle noise for the Automobile Manufacturers Association.^{D-9} As part of this survey, 20 different urban-suburban residential locations not in the vicinity of airports were studied in Boston, Detroit, and Los Angeles. Noise measurements were acquired and a social survey of 1200 respondents was conducted. Part of the survey was directed towards obtaining the respondents' judgement, on a category scale, of the exterior noisiness at their places of residence.

The averaged judged noisiness values per site are plotted on Figure D-15 as a function of measured L_{dn} values. The significance of these "non-aircraft" data is the comparison they permit with other survey data acquired exclusively around airports. Intercomparison of

these data with previous data indicate that for an L_{dn} value of 60 dB, the site would be judged "quite" noisy. The average annoyance for a group would be classed as "little," but about 25% of the people would still claim to be highly annoyed.

When all respondents, irrespective of exposure site, were asked whether they were annoyed by motor vehicle noise, 53% were not annoyed, while 46% were, with an average intensity of annoyance of 4.2 on a scale where 3 stood for "quite annoying," 4 for "definitely annoying" and 5 "strongly annoying." Of the 46% of respondents who stated they were annoyed by motor vehicle noise, 77% experienced annoying noises while in their homes, 12% while in transit, and only 5% at work.

This indication, that the principle annoyance with environmental noise occurs in the residential situation is further confirmed in the results of the London City Noise Survey^{D-18} summarized in Table D-9.

D. Summary of Annoyance Survey Results

The relationships among percent complainants and percent highly annoyed (Figure D-14) together with the combined results of the two Heathrow surveys and the Tracor survey (Figures D-10 and D-13) have been combined in Figure D-16 to produce a general summary relationship between day-night sound level, percent complainants and percent highly annoyed. Also included in the figure is a scale of the relative

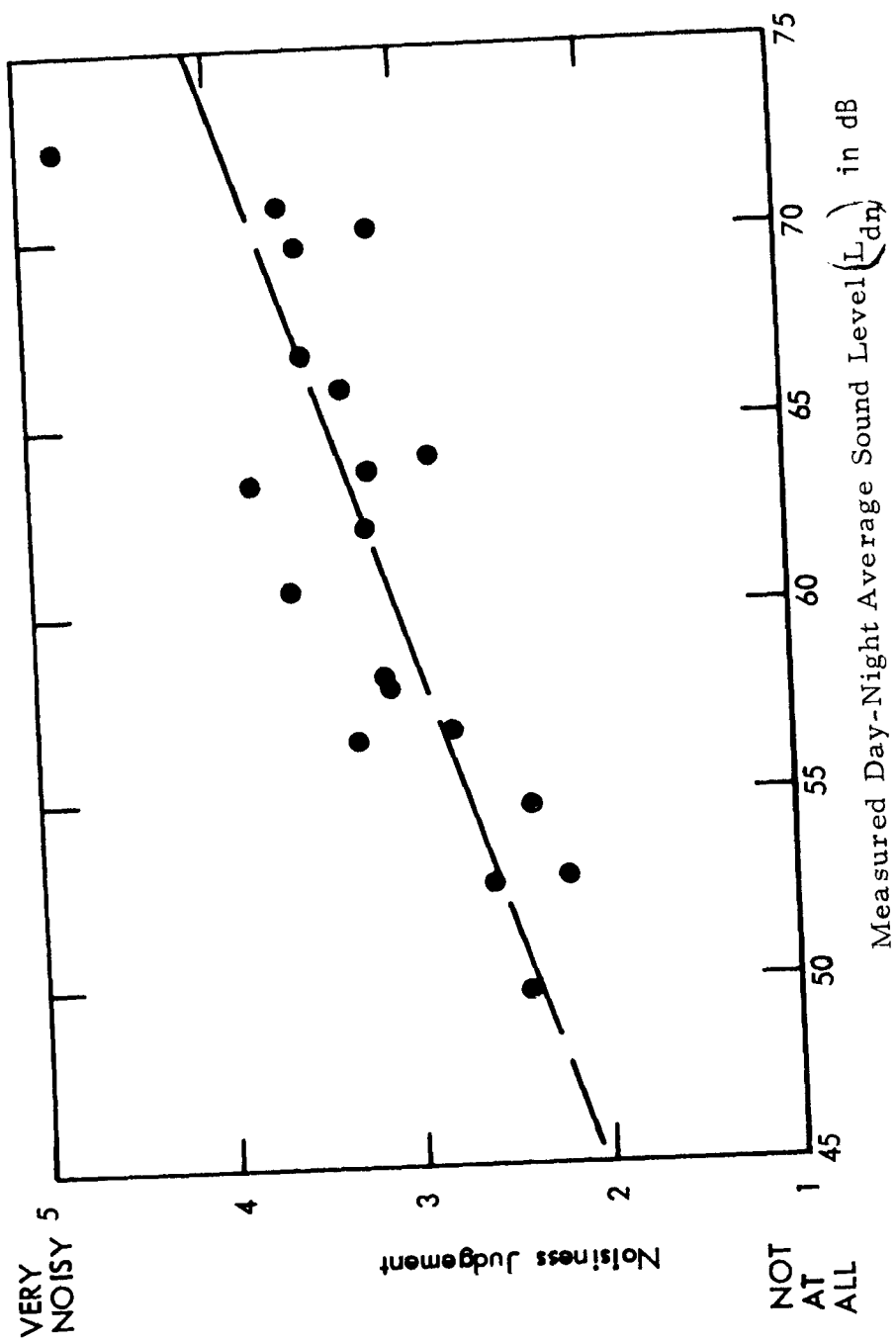


Figure D-15. Judged Noisiness at Automobile Manufacturers Association Survey Sites

TABLE D-9
 PERCENTAGE OF PEOPLE WHO WERE EVER DISTURBED BY NOISE AT HOME,
 OUTDOORS AND AT WORK IN LONDON CITY SURVEY ^{D-43}

	At Home	Outside	At Work
Disturbed from time to time	56	27	20
Notice but not disturbed	41	64	70
Do not notice	3	9	10

importance of aircraft noise as a factor in disliking an area or wanting to move (Figures D-11 and D-12) and the average values of the three main community noise reaction categories (Figure D-7).

The results indicate that below an outdoor day-night sound level of 55 dB, less than 1% of the households would be expected to complain, although 17% of the people may respond as highly annoyed when questioned in a social survey. "No reaction" would be expected in the average community, and noise would be the least important factor in attitude towards neighborhood. When the outdoor L_{dn} is 60 dB, approximately 2% of the households might be expected to complain, although 23% of the people may respond as highly annoyed when questioned, and some reaction would be expected from an average community. If the levels increase over 65 dB, more than 5% may be expected to complain, and over 33% would respond as highly annoyed. Increasingly, vigorous community reaction could be expected, and noise becomes the dominant factor in disliking an area.

It is important to keep in mind that the annoyance/tolerance limits obtained from the social survey results have been found to be based on relatively well defined health and welfare criteria: the disturbance of essential daily activities.^{D-19}

Relative Importance of Aircraft As A
Factor in Disliking Area or Wanting to
Move (Heathrow 1st Study) D-7, D-10, D-11, D-12 and D-13

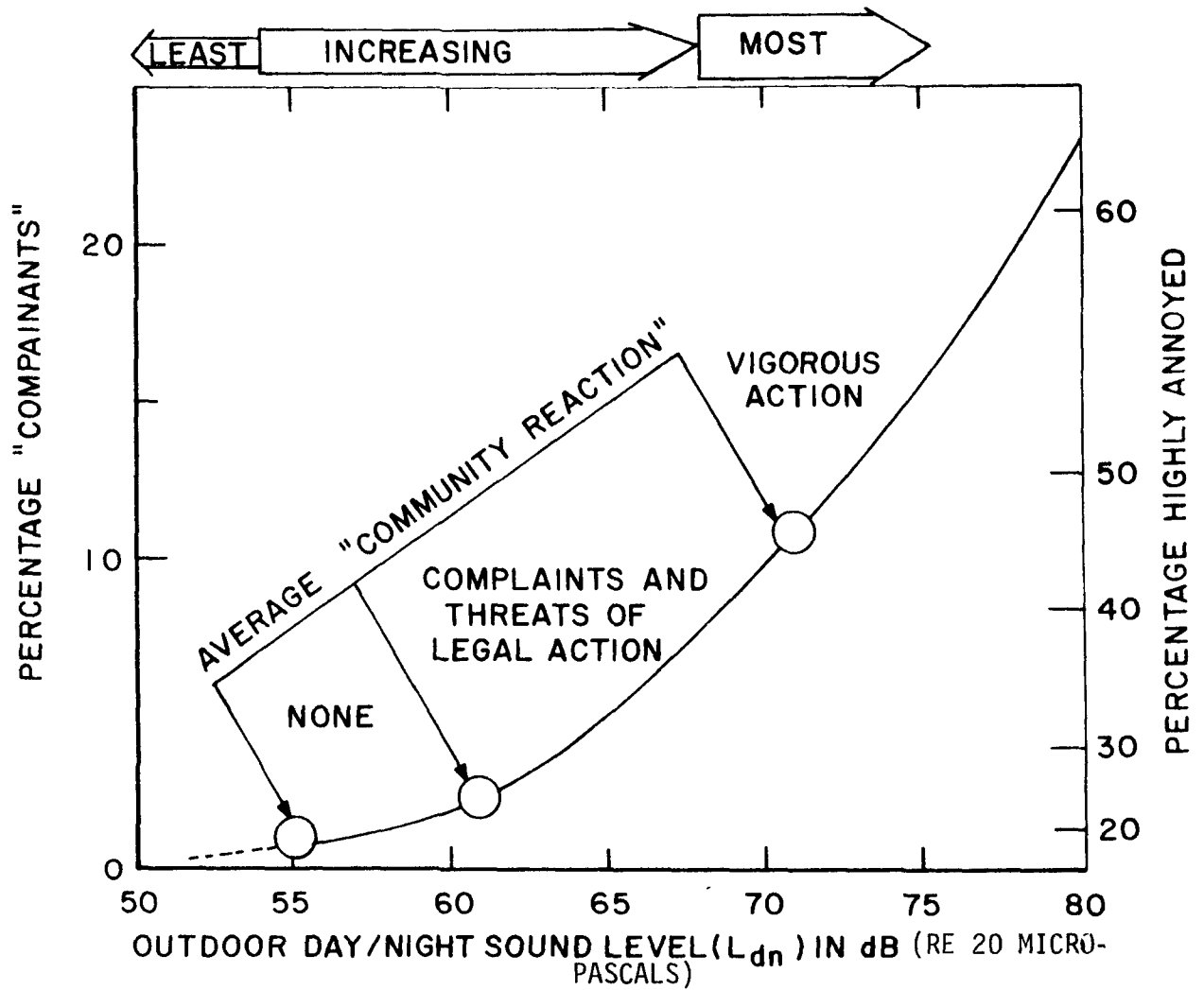


Figure D-16. Summary of Annoyance Survey and Community Reaction Results

V. Various Prior Recommendations for Acceptable Sound Levels

Recommended values for acceptable sound levels in various types of spaces have been suggested by a number of authors over the past two decades. These recommendations generally have taken into consideration such factors as speech intelligibility and subjective judgements by space occupants. However, the final values recommended were largely the result of judgements on the part of the authors, which in the case of acoustical consultants, have been motivated by the need for design values which will be on the "safe" side. One of the earliest publications providing recommended values in modern terminology was that of Knudsen and Harris^{D-21} in 1950. It is of interest to quote from the text to understand the reasoning used to develop the recommended levels:

Acceptable Noise Levels in Buildings

The highest level of noise within a building that neither disturbs its occupants nor impairs its acoustics is called the acceptable noise level. It depends, to a large extent, on the nature of the noise and on the type and customary use of the building. The time fluctuation of the noise is one of the most important factors in determining its tolerability. For example, a bedroom with an average noise level of 35 dB, with no instantaneous peak levels substantially higher, would be much more conducive to sleep than would be a room with an average noise level of only 25 dB but in which the stillness is pierced by an occasional shriek. Furthermore, levels that are annoying to one person are unnoticed by another. It is therefore impossible to specify precise values within which the noise levels should fall in order to be acceptable. It is useful, however, to know the range of average noise levels that are acceptable under average conditions. A compilation of such levels for various types of rooms in which noise conditions are likely to be a significant problem is given in [Table D-10.*] The

* These values are given in the first column of Table D-10.

PRIOR RECOMMENDATIONS OF SOUND LEVELS IN VARIOUS SPACES

$$AB(A)^C = AC + 10$$

recommended acceptable noise levels in this table are empirical values based on the experience of the authors and others they have consulted. Local conditions or cost considerations may make it impractical to meet the high standards inherent in these relatively low noise levels. In more than 80 percent of the rooms of some of the types listed, the prevalent average noise levels exceed the recommended acceptable levels. However, it should be understood that the acceptance of higher noise levels incurs a risk of impaired acoustics or of the comfort of the individuals in the room.

Since 1950 recommendations by a number of authors, as well as national standards, have been presented. Eighteen of these recommendations are tabulated in Table D-10. D-21 through D-38

It is encouraging to note the consistency displayed, although many of the later recommendations may be based on the recommendations of the earlier authors.

6. Summary of Noise Interference With Human Activities and Resulting Health/Welfare Effects

The primary effect of noise on human health and welfare due to interference with activity comes from its effect on speech communication.

The levels that interfere with human activities which do not involve active listening cannot be quantified relative to the level of a desired sound. Rather, the level of an intruding sound that will cause an interference depends upon its relation to the level of the other background sounds in the environment and the state of the human auditor, e.g., the degree of concentration when endeavoring to accomplish a mental task, or the depth of sleep, etc.

The levels of environmental noise that are associated with annoyance depend upon local conditions and attitudes. They cannot be clearly identified in terms of the national public health and welfare. The only levels which can be so identified are the levels which are required to assure that speech communication in the home and outdoors is adequate in terms of public health and welfare. Lower levels may be desirable and appropriate for specific local situations.

The level identified for the protection of speech communication is 45 dB within the home. Allowing for the 15 dB reduction in sound level between outdoors and indoors, this level becomes an outdoor day-night sound level of 60 dB (re 20 micropascals) for residential areas. For outdoor voice communication, the outdoor day-night level of 60 dB allows normal conversation at distances up to 2 meters with 95% sentence intelligibility.

Although speech interference has been identified as the primary interference of noise with human activities, and as one of the primary reasons for adverse community reactions to noise and long-term annoyance, a margin of safety of 5 dB is applied to the maximum outdoor level to give adequate weight to all of these other adverse effects.

Therefore, the outdoor day-night sound level identified for residential areas is a day-night sound level of 55 dB.

The associated interior day-night sound level within a typical home which results from outdoors is 15 dB less, or 40 dB. The expected indoor daytime level for a typical neighborhood which has an outdoor day-night sound level of 55 dB is approximately 40 dB, whereas the nighttime level is approximately 32 dB (see Figure A-7). This latter value is consistent with the limited available sleep criteria (D-5). Additionally, these resulting indoor levels are consistent with the background levels inside the home and which have been recommended by acoustical consultants as "acceptable" for many years (Table D-10).

The effects associated with an outdoor day-night sound level of 55 dB are summarized in Table D-11. The summary shows:

- (1) satisfactory outdoor average sentence intelligibility may be expected for normal voice conversations over distances of up to 3.5 meters;
- (2) depending on attitude and other factors non-acoustical the average expected community reaction is "none" although 1% may complain and 17% indicate "highly annoyed" when responding to social survey questions; and
- (3) noise is the least important factor governing attitude towards the area.

Identification of a level which is 5 dB higher than the 55 dB identified above would significantly increase the severity of the average community reaction, as well as the expected percentage of complaints and annoyance. Conversely,

TABLE D-11

SUMMARY OF HUMAN EFFECTS IN TERMS OF SPEECH COMMUNICATION, COMMUNITY REACTION, COMPLAINTS, ANNOYANCE AND ATTITUDE TOWARDS AREA ASSOCIATED WITH AN OUTDOOR DAY/NIGHT SOUND LEVEL OF 55 dB re 20 MICROPASCALS

<u>Type of Effect</u>	<u>Magnitude of Effect</u>
Speech - Indoors	100% sentence intelligibility (average) with a 5 dB margin of safety
- Outdoors	100% sentence intelligibility (average) at 0.35 meters
	99% sentence intelligibility (average) at 1.0 meters
	95% sentence intelligibility (average) at 3.5 meters
Average Community Reaction	None, 7 dB below level of significant "complaints and threats of legal action" and at least 16 dB below "vigorous action" (attitudes and other non-level related factors may affect this result)
Complaints	1% dependent on attitude and other non-level related factors
Annoyance	17% dependent on attitude and other non-acoustical factors
Attitudes Towards Area	Noise essentially least important of various factors

identification of a level 5 dB lower than the 55 dB identified above would reduce the indoor levels resulting from outdoor noise well below the normal background indoors. It would decrease speech privacy outdoors to marginal distance. Little change in annoyance would be made since at levels below the identified level, individual attitude and life style, as well as local conditions, are more important factors in controlling the resulting magnitude of the level of the intruding noise.

In conclusion, a L_{dn} level of 55 dB is identified as outdoor level in residential areas compatible with the protection of public health and welfare. The level of 55 dB is identified as maximum level compatible with adequate speech communication indoors and outdoors. With respect to complaints and long term annoyance this level is clearly a maximum satisfying the large majority of the population (see Table D-1)). However, specific local situations, attitudes, and conditions may make lower levels desirable for some locations. A noise environment not annoying some percentage of the population cannot be identified at the present time by specifying noise level alone.

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APPENDIX B

GENERAL EFFECTS OF NOISE NOT DIRECTLY USED IN IDENTIFYING LEVELS OF NOISE REQUISITE TO PROTECT PUBLIC HEALTH AND WELFARE

There are a multitude of adverse effects that can be caused by noise which may, both directly or indirectly, affect public health and welfare. However, there are only three categories of adverse relationships in which the cause/effect relationships are adequately known and can be justifiably used to identify levels of environmental noise for protection of public health and welfare. These are: (1) the effect of noise on hearing, (2) the effect of noise on the general mental state as evidenced by annoyance, and (3) the interference of noise with specific activities. These three categories of effects, discussed in detail in Appendices C and D, will serve as the main basis for identifying the levels in Section 3 of this document.

Since a causal link between community noise and extra-auditory disease has not been established, this document proceeds on the assumption that protection against noise-induced hearing loss is sufficient for protection against extra-auditory effects. However, the generation of most stress-related disorders is somewhat longer than that required for noise-induced hearing loss, and this time interval may have clouded a causal association. Noise of lesser amplitude than that traditionally identified for the protection of hearing causes regular and dependable physiological responses in humans. Similar noise-induced physiological changes in sensitive animals regularly leads to the development of stress-related disease. The implications of generalizing from these animal studies to humans is not clear. With the availability of new information concerning the role of noise as a stressor

in the pathogenesis of stress-related disease, the levels identified in this document may require further review.

In the meantime, the question that is invariably asked is, "What is the significance of omitting all other physiological effects?"

In answer to this question, most experts agree that, at present, there is insufficient knowledge of the effect of noise on health except for noise-induced hearing loss, (defining health in the more restricted sense, as the absence of disease). In a recent review of this subject ^{E-1} it was concluded that: "if noise control sufficient to protect persons from ear damage and hearing loss were instituted, then it is highly unlikely that the noises of lower level and duration resulting from this effort could directly induce non-auditory disease." Therefore, in this document, hearing loss will be considered the controlling effect.

This is not to say that there are no indications to arouse concern in the area of non-auditory effects, but substantial further research on these effects of noise on health would be required to alter the above statements. Such research should be fostered, and the results should be carefully monitored for any evidence indicating that the maximum sound levels identified herein are excessive.

Although noise can affect people indirectly by disturbing the general environment in which they live, the noise levels required to produce significant non-auditory physiological effects are normally much higher than the levels required to protect the public health and welfare from adverse effects on hearing or interference with activities.

However, for special conditions, certain effects which have not been directly utilized in identifying the levels in this document, should be examined. For this purpose, certain of the summary paragraphs of the EPA criteria document "Public Health and Welfare Criteria for Noise"^{E-2} are included in this appendix. Caution must be exercised when using such information since, in many cases, there is no way to relate the exact exposure level to the effect in question.

I. Effects of Noise on Humans

A. Performance and Work Efficiency

Continuous noise levels above 90 dBA appear to have potentially detrimental effects on human performance, especially on what have been described as noise-sensitive tasks such as vigilance tasks, information-gathering and analytical processes. Effects of noise on routine-type tasks appear to be much less important, although cumulative degrading effects have been demonstrated by researchers. Noise levels of less than 90 dBA can be disruptive, especially if they have predominantly high frequency components, are intermittent, unexpected, or uncontrollable. The amount of disruption is highly dependent on:

- The type of task.
- The state of the human organism.
- The state of morale and motivation.

Noise does not usually influence the overall rate of work, but high levels of noise may increase the variability of the work rate. There may be "noise pauses" or gaps in response, sometimes followed by compensating increases in work rate. Noise is more likely to reduce the accuracy of work than to

reduce the total quantity of work. Complex or demanding tasks are more likely to be adversely affected than are simple tasks. Since laboratory studies represent idealized situations, there is a pressing need for field studies in real-life conditions.

Although these possibly adverse effects were not used in identifying the noise levels in this document, employers or educational authorities should consider their influence since it might provide additional motivation to achieve the values seen in Table D-10 of Appendix D.

B. Effects of Noise on the Autonomic Nervous System and Other Non-Auditory Physiological Effects

Noise can elicit many different physiological responses. However, no clear evidence exists to indicate that the continued activation of these responses leads to irreversible changes and permanent health problems. Sound of sufficient intensity can cause pain to the auditory system, however, such intense exposures are rarely encountered in the non-occupational environment. Noise can also affect one's equilibrium, but the scarce data available indicates that the intensities required to do so must be quite high, similar to the intensities that produce pain.

Noise-induced orienting reflexes serve to locate the source of a sudden sound and, in combination with the startle reflex, prepare the individual to take appropriate action in the event of danger. Apart from possibly increasing the chance of an accident in some situations, there are no clear indications that the effects are harmful since these effects are of short duration and do not cause long-term physiological changes.

Noise can definitely interfere with sleep, however, relating noise-exposure level to the quality of sleep is difficult. Even noise of moderate levels can change the pattern of sleep, but the significance of these changes is still an open question.

Noise exposure may cause fatigue, irritability, or insomnia in some individuals, but the quantitative evidence in this regard is also unclear. No firm relationships between noise and these factors can be established at this time.

C. Interaction of Noise and Other Conditions or Influences

Determination of how various agents or conditions interact with noise in producing a given effect requires three separate determinations: the effect produced by the noise alone, the effect produced by the other agent alone, and the effect produced by the combined action of the agent and the noise. These results indicate whether the combined effect is indifferent, additive, synergistic, or ameliorative.

Chemical agents may have a harmful effect when combined with noise. Ototoxic drugs that are known to be damaging to the hearing mechanism can be assumed to produce at least an additive effect on hearing when combined with noise exposure. There are instances in which individuals using medication temporarily suffer a hearing loss when exposed to noise, but there is no definitive data on the interaction of ototoxic drugs and noise on humans. Evidence linking hearing loss with the combination of noise and industrial chemicals is also inconclusive.

The possibility of a synergistic effect exists when noise and vibration occur together. Vibration is usually more potent than noise in affecting

physiological parameters. There appears to be consensus that vibration increases the effect of noise on hearing, but such increases are probably quite small.

Health disorders may interact with noise to produce a hearing loss. Mineral and vitamin deficiencies are one example but little research has been done on the effect of such deficiencies on susceptibility to noise. A reasonable hypothesis is that illness increases an individual's susceptibility to the adverse effects of noise. However, as with the other hypotheses, conclusive evidence is lacking.

Noise exposure can be presumed to cause general stress by itself or in conjunction with other stressors. Neither the relationship between noise exposure and stress nor the noise level or duration at which stress may appear have been resolved.

Exposure to moderate intensities of noise that are likely to be found in the environment may affect the cardiovascular system in various ways, but no definite permanent effects on the circulatory system have been demonstrated. Noise of moderate intensity has been found to cause vasoconstriction of the peripheral blood vessels and pupillary dilation. There is no evidence that these reactions to noisy environments can lead to harmful consequences over prolonged periods of noise exposure. However, speculation that noise might be a contributing factor to circulatory difficulties and heart disease is not yet supported by scientific data.

II. Effects of Noise on Wildlife and Other Animals

Noise produces the same general types of effects on animals as it does on humans, namely: hearing loss, masking of communication, behavioral, and non-auditory physiological effects.

The most observable effects of noise on farm and wild animals seem to be behavioral. Clearly, noise of sufficient intensity or noise of aversive character can disrupt normal patterns of animal existence. Exploratory behavior can be curtailed, avoidance behavior can limit access to food and shelter, and breeding habits can be disrupted. Hearing loss and the masking of auditory signals can further complicate an animal's efforts to recognize its young, detect and locate prey, and evade predators. Competition for food and space in an "ecological niche" results in complex interrelationships and, hence, a complex balance.

Many laboratory studies have indicated temporary and permanent noise-induced threshold shifts. However, damage-risk criteria for various species have not yet been developed. Masking of auditory signals has been demonstrated by commercial jamming signals, which are amplitude and frequency modulated.

Physiological effects of noise exposure, such as changes in blood pressure and chemistry, hormonal balance and reproductivity have been demonstrated in laboratory animals and, to some extent, in farm animals. But these effects are understandably difficult to assess in wildlife. Also, the amount of physiological and behavioral adaptation that occurs in response to noise stimuli is as yet unknown.

Considerable research needs to be accomplished before more definitive criteria can be developed. The basic needs are:

- More thorough investigations to determine the point at which various species incur hearing loss.
- Studies to determine the effects on animals on low-level, chronic noise exposures.

- Comprehensive studies on the effects on animals in their natural habitats. Such variables as the extent of aversive reactions, physiological changes, and predator-prey relationships should be examined.

Until more information exists, judgments of environmental impact must be based on the existing information, however incomplete. The most simple approach is to assume that animals will be at least partially protected by application of maximum levels identified for human exposure.

III. Effect of Noise on Structures

Airborne sound normally encountered in real life does not usually carry sufficient energy to cause damage to most structures. The major exceptions to this are sonic booms produced by supersonic aircraft, low frequency sound produced by rocket engines and some construction equipment, and sonic fatigue.

From an environmental point of view, the most significant effects are those caused by sonic booms on the secondary components of structures. These effects include the breaking of windows and cracking of plaster. Effects such as these have led to the speculation that historical monuments and archeological structures may age more rapidly when exposed to repeated sonic booms. However, the levels identified in Appendix G to protect against adverse effects on public health and welfare are low enough to protect against damage to structures.

REFERENCES FOR APPENDIX E

- E-1. "Effect of Noise on People," Environmental Protection Agency, NTID 300.7, December 1971.
- E-2. "Public Health and Welfare Criteria for Noise," Environmental Protection Agency, 550/9-73-002, July 27, 1973.

APPENDIX F

EPA's Responsibility to Identify Safe Levels for Occupational Noise Exposure

Although the workplace is a vital component of the human environment, the Environmental Protection Agency does not have jurisdiction over most occupational health and safety matters. These matters have traditionally been the responsibility of the Departments of Labor and Health, Education and Welfare. Section 6(b)(5) of the Occupational Safety and Health Act of 1972 specifies that the Secretary of Labor, "...in promulgating standards dealing with toxic materials or harmful physical agents ..., shall set the standard which most adequately assures, to the extent feasible, on the basis of the best available evidence, that no employee will suffer material impairment of health or functional capacity even if such employee has regular exposure to the hazard dealt with by such standard for the period of his working life ... In addition to the attainment of the highest degree of health and safety protection for the employee, other considerations shall be the latest available scientific data in the field, the feasibility of the standards, and experience gained under this and other health and safety laws."

In contrast, section 5(a)(2) of the Noise Control Act of 1972 directs EPA's Administrator to "publish information on the levels of environmental noise, the attainment and maintenance of which in defined areas under various conditions are requisite to protecting the public health and welfare with an adequate margin of safety."

The words "public health and welfare" appear in a number of places in the Noise Control Act, and have a broader reference than those defining jurisdiction in the Occupational Safety and Health Act, namely, the entire American public at all times rather than the American worker during his workday. In addition, the requirement of an "adequate margin of safety" does not appear in the Occupational Safety and Health Act, which instead uses the phrase, "no employee will suffer material impairment of health or functional capacity." These distinctions indicate that EPA's duty to identify levels for exposure to noise is broader in scope and more stringent than OSHA's duty to protect in the occupational area. Furthermore, the intent of this document is to identify safe levels for a variety of settings, whereas the responsibility of HEW is to develop occupational exposure criteria and that of the Department of Labor is to promulgate and enforce standards. In the writing of such standards, the Labor Department must take feasibility into account, a consideration omitted in the writing of this document.

EPA's responsibility to identify levels of exposure to noise "in defined areas under various conditions" necessarily includes an identification of exposure levels in the workplace in order to satisfy the intent of the law to consider total human exposure to noise. Working hours are an inseparable part of the individual's 24-hour day, and they must be considered in order to evaluate the contributions of nonoccupational exposure to his daily and lifetime dose. For this reason, it is of utmost importance that the levels specified for occupational and non-occupational noise be compatible.

APPENDIX G

IMPULSE NOISE AND SOME OTHER SPECIAL NOISES

I. Impulse Noise

Impulse noise is defined in various ways (G-1, G-2, G-11) but generally means a discrete noise (or a series of such noises) of short duration (less than a second), in which the sound pressure level rises very rapidly (less than 500 msec, sometimes less than 1 msec) to a high peak level before decaying below the level of background noise. The decay is frequently oscillatory, because of sound reflections and reverberation (ringing) in which case the spectrum of the oscillation may also be important in determining the hazard to hearing. Some authors distinguish reverberant impulse noise as "impact" noise (typically produced by metal to metal impact as in industrial forging), to distinguish it from simple oligophasic impulses (typified by a gunshot in the open air) (G-3).

The peak sound pressure level (SPL) is an important but not the sole parameter determining hazard. Some typical values for disturbing or hazardous impulse noises are given in Table G-1.

NOTE: Peak SPL for impulses cannot be properly measured with a standard sound level meter, which is a time-averaging device. Oscillographic techniques must be used.

TABLE G-1

SOME TYPICAL VALUES OF PEAK SPL FOR IMPULSE NOISE
(in dB re 0.00002 N/m²)

<u>SPL</u>	<u>EXAMPLE</u>
190+	Within blast zone of exploding bomb
160-180	Within crew area of heavy artillery piece or naval gun when shooting
140-170	At shooter's ear when firing hand gun
125-160	At child's ear when detonating toy cap or firecracker
120-140	Metal to metal impacts in many industrial processes (e.g., drop-forging; metal-beating)
110-130	On construction site during pile-driving

A. Effects of Impulse Noise on Man

(1) Cochlear Damage and Hearing Loss

Impulse noise can produce temporary (TTS) and permanent threshold shift (PTS). The pattern essentially resembles that produced by a continuous noise but may involve somewhat higher frequency losses (maximal at 4 to 6 kHz) and recovery from impulse-NIPTS can be more variable (G-9). A blow to the head can have a similar effect. TTS (and, by inference, PTS) in man depends on many factors, the more important of which are reviewed in more detail later. Impulse noise (like continuous noise) can also be shown to produce pathological changes in the inner ear (cochlea) of mammals, notably destruction and degeneration of the haircells of the hearing organ, and atrophic changes in related structures. A quantitative relationship between the amount of visible damage to the cochlea and the amount of NIPTS has not yet been clearly established (G-2, G-4, G-5).

(2) Other Pathological Effects

Exposure to blast or to sustained or repeated impulsive airborne over-pressures in the range 140 to 150 dB (5 to 15 psf) or higher can cause generalized disturbance or damage to the body apart from the ear. This is normally a problem for military personnel at war (e.g., artillerymen firing field guns), and need not be considered further here. Transient over-pressures of considerable magnitude can be experienced due to sonic boom but are unlikely to be hazardous to the ear (see below).

(3) Startle and Awakening

Impulsive noises which are novel, unheralded, or unexpectedly loud can startle people and animals. Even very mild impulsive noises (classically, the dropping of a pin) can awaken sleepers. In some circumstances (e.g., when a person is handling delicate or dangerous objects or materials), startle can be hazardous. Because startle and alerting responses depend very largely upon individual circumstances and psychological factors unrelated to the intensity of the sound, it is difficult to make any generalization about acceptable values of SPL in this connection. A high degree of habituation, even to intense impulse noises such as gunfire, is normally seen in animals and man when the exposure is repeated, provided that the character of the stimulus is not changed.

(4) Parameters of Impulse Noise Exposure

Impulse noise is characterized completely by the waveform and spectrum. Various summary parameters are also useful in characterizing an impulsive noise, these include:

- (a) Peak SPL (in dB re 0.00002 N/m²)
- (b) Effective duration (in milliseconds or microseconds)
- (c) Rise time

In addition, the following are important for predicting the effects of the impulse on man:

- (d) Number of repeated impulses in a daily or other cumulative exposure
- (e) Intervals or average interval between repeated impulses (or rate of impulse occurrence)
- (f) Individual susceptibility to inner ear damage
- (g) Orientation of the ear with respect to the noise
- (h) Preceding or simultaneous exposure to continuous noise at TTS-producing levels
- (i) Action of acoustic reflex, if elicited
- (j) Audiometric frequency

B. Impulse Noise Exposure Criteria and Limits

(1) Hearing Damage and Criteria for Impulse Noise

It is obvious from the above lists that limiting impulse noise exposure for hearing conservation is not an easy matter. Existing guidance in this matter in some spheres is seriously inadequate or misleading (G-3). For instance, the Occupational Safety and Health Act (OSHA) (and also the previous occupational noise regulations embodied in Walsh-Healey) prescribes a limiting level of 140 dB SPL for industrial impulse noise, with no allowance for any other parameter.

In 1968, Working Group 57 of CHABA prepared a damage risk criterion for gunfire noise, based essentially on the work of Coles et. al. (G-6), which included procedures to allow for repetition of impulses and some of the other parameters listed above (G-1). Some modification has recently been proposed by Coles and Rice (G-7). The CHABA proposal was intended to protect 95% of ears.

C. Guidelines for Evaluating Hazard from Impulse Noise Exposure

(1) Peak Level

The growth of TTS at 4 kHz with increase in peak level above 130 dB SPL of impulses (clicks) presented at a steady rate has been demonstrated by Ward et. al. (G-8). Based on TTS data from rifle shooters, Kryter and Garinther (G-18) estimated permanent hearing levels expected to result from daily exposure to a nominal 100 rounds of rifle shooting noise in selected percentiles. Their data are reproduced in Table G-2 below, showing the increasing hazard with increasing peak level and with increasing audiometric frequency up to 6000 Hz.

CHABA's (G-1) 1968 DRC (See Figure G-1) recommended limits to peak level as a function of impulse duration (discussed below) for a nominal exposure of 100 impulses per day at normal incidence. These limits were intended to protect 95% of the people according to an implied criterion of NIPTS not exceeding 20 dB at 3 kHz or above, after 20 yrs. If 90% of the people were to be protected to a criterion of NIPTS

TABLE G-2

ESTIMATED EXPECTED PERMANENT HEARING LEVEL (IN DB RE ASA:1951)
 IN SELECTED PERCENTILES OF THE MOST SENSITIVE EARS
 FOLLOWING NOMINAL DAILY EXPOSURE TO RIFLE NOISE
 (DURING TYPICAL MILITARY SERVICE),
 NAMELY, 100 ROUNDS AT ABOUT 5 SECOND INTERVALS G-18

Peak SPL* (dB)	Percentile Exceeding HL	Audiometric Test Frequency (Hz)				
		1000	2000	3000	4000	6000
170	10	25	35	70	85	90
	25	15	25	55	65	70
	50	0	10	35	45	50
165	10	16	20	62	60	67
	25	9	10	32	45	52
	50	0	0	12	25	47
160	10	15	16	25	45	60
	25	7	8	18	35	45
	50	0	0	0	15	25
150	10	10	15	15	35	50
	25	3	4	8	25	40
	50	0	0	0	10	20
140	10	0	5	10	30	45
	25	0	2	2	18	30
	50	0	0	0	5	10

*At the ear, grazing incidence.

not exceeding 5 dB at 4 kHz, it would be necessary to lower the CHABA limits by 12 dB (15 dB reduction to meet the more stringent criterion, assuming an approximately decibel to decibel relationship in the range of interest (see Table G-2), less 3 dB elevation to apply the limit to the 90th percentile). This modified CHABA limit is shown in Figure G-1 (hatched lines).

(2) Duration of Impulse

Hazard increases with the effective duration of impulses (G-10). Impulse duration is defined according to the type of impulse (A, simple peak, or B, oscillatory decay) (G-1, G-6); and CHABA has recommended separate limits for A- and B-durations (Figure G-1). For effective durations much above 1 msec, a more stringent limit should be applied to reverberant oscillations (e.g., metallic impacts in industry or gunshots in a reverberant indoor range) than to simple A-type impulses (e.g., gunshots in the open). When the type of impulse cannot be determined, it is conservative to assume the B-duration.

CHABA^{G-1} 1968 warned that the 152 and 138 dB plateaux are only "gross estimates": similar remarks apply to the modified CHABA limit here proposed, in which the corresponding plateaux are 140 and 126 dB SPL.

(3) Rise Time

This parameter is usually correlated closely with peak pressure. Present evidence as to its effect on hearing risk is insufficient for allowance to be made for it in damage risk criteria.

(4) Spectrum (or Waveform)

Impulses with largely high frequency spectral components (e.g., reverberant gunshots) are generally more hazardous to the hearing mechanism than predominantly low-frequency impulses (e.g., distance-degraded blast waves; sonic booms) of the same peak SPL. However,

comparative data are as yet too scanty to serve as the basis of differential damage risk criteria.

(5) Number of Repeated Impulses

TTS (and, by inference, NIPTS) grows linearly with the number of impulses in a series, or linearly with time when the rate of impulses is constant ^{G-8}. CHABA ^{G-1} recommended an allowance of -5 dB for every tenfold increase in number of impulses in a daily exposure (Figure G-2). Recently, Coles and Rice ^{G-7} have contended that this rule is underprotective for large numbers (N) of impulses and have recommended a modification (see Figure G-2). In 1973, McRobert and Ward ^{G-3} questioned this modification, maintaining that it is probably grossly overprotective for $N > 1000$, and commented also on the CHABA rule in the light of recent experiments. Figure G-2 reproduces a comparison by McRobert and Ward of the CHABA rule with Coles and Rice ^{G-7} and an "equal-energy" rule (10 dB weighting for each tenfold increase in N) originating at $N = 100$.

All in all, an "equal-energy" rule appears to fit the existing data tolerably well and is easy to apply in practice, but it may underestimate the hazard for values of N substantially less than 100 (isolated impulses).

(6) Interval Between or Rate of Occurrence of Impulses

Ward, et. al. ^{G-8} showed that, when equal impulses occur at more than 1/sec, TTS development is slower than when the average interval is in the range 1 to 9 sec, presumably because the acoustic reflex is

maintained. When the interval is long (range 9 - 30 seconds), TTS again develops more slowly, probably because the interval allows some recovery. A conservative rule would be to apply a 5 dB penalty when the average impulse interval lies between 1 and 10 seconds: such an interval may be typical of such activities as range shooting in groups, heavy hammering in industry, or pile-driving.

(7) Individual Susceptibility to Inner Ear Damage

The distribution of individual susceptibility to NITTS and NIPTS in the population is believed to have the same pattern for impulse as for continuous noise. Similar rules may therefore be applied when predicting risk of impulse-NIPTS. The CHABA ^{G-1} DRC was intended to protect 95% of the population; a relaxation of 3 dB may be applied to obtain limits for the 90th percentile.

(8) Orientation of the Ear

Based on Hodge & McCommons ^{G-12} and other data, CHABA ^{G-1} has recommended, in the case of gun noise, a penalty of 5 dB to apply when the noise strikes the eardrum at normal rather than grazing incidence. If uncertain, it is conservative to assume normal incidence.

(9) Combinations of Impulse and Continuous Noise

Certain combinations of impulsive and continuous noise, such as occur in industry may be antagonistic-- that is, one may provide some protection from the other -- probably because of acoustic reflex activation. Other studies, however, show that the effects of combined impulse and steady noise are additive ^{G-2, G-16}. ISO, in its Recommendation R/1999 ^{G-17}, proposed a flat weighting of 10 dB for

"impulsiveness" in distributed noise, but the validity of this rule is questionable. On present evidence, it is probably safest to evaluate simultaneous impulsive and continuous noise separately, each according to its own criterion.

(10) Action of the Acoustic Reflex

This protective mechanism is valueless in the case of brief single or isolated impulses because it has a latency of at least 10 msec and takes up to 200 msec before being fully effective. Rapidly repeated impulses, ^{G-7} however, or simultaneous continuous noise, ^{G-15} may activate it sufficiently to provide up to 10 dB of protection: but this is too variable and uncertain to be allowed for in damage risk criteria.

(11) Audiometric Frequency

Generally speaking, impulse noise affects the hearing in much the same way as does continuous noise, with TTS and PTS beginning and growing most rapidly at 4 to 6 kHz. It is possible, however, that impulse noise may have relatively more effect on high-frequency hearing or affect hearing at higher frequencies. ^{G-13, G-14}

D. Use of Equivalent Continuous Sound Level (L_{eq}) In Evaluation of Impulse Noise

Support for the extension of the equal-energy (equivalent A-weighted sound energy) concept of hearing hazard from continuous noise exposure to include impulse noise exposure has recently been gaining ground. ^{G-19} At the 1970 Teddington Conference on "Occupational Hearing Loss", it was suggested that a unifying rule based on this concept might

be drawn up to link continuous and impulse noise exposure limits in a single continuum relating A-weighted sound level to effective daily exposure duration. G-20 An empirical formula enabling the A-weighted L_{eq} to be calculated from the peak sound pressure (p_h) repetition rate in impulses per second (N) and the decay constant of the impulse envelope (k) in inverse seconds, was introduced as follows (G-21):

$$L_{eq} = 85.3 + 20 \log P_h + 10 \log N - 10 \log k + 10 \log (1 - e^{-2/kN})$$

where p_h is absolute pressure in N/m^2 ; not sound pressure level in dB. For one impulse of the B- type, this formulation simplifies such that the L_{eq} of an A-weighted continuous pulse of duration T is equal to the peak sound Pressure Level (in dB) of an impulse which decays by 20 dB in time T minus 9 dB. The use of this formula assumes the impulse is composed of broad-band noise that exponentially decays. This relationship, at the present time, should not be used to evaluate impulse data until it is further justified by more experimental research. However, it does provide further support of the equal energy concept outlined in Appendix C.

E. Summary and Conclusions

(1) Hearing Conservation

The following rules may be recommended if it is desired to protect 90% of the people from significant impulse-NIPTS, that is, from impulse-NIPTS exceeding 5 dB at 4 kHz after 10 years of repeated exposures:

(a) Measure or predict the peak level (SPL) and A- or B-type duration of the impulse, using proper oscillographic technique (NOTE: if the noise is sufficiently rapidly repetitive to fit Coles and Rice's ^{G-7} category "C", it may be treated and measured as continuous noise and evaluated accordingly in dBA. This usually means a repetition rate exceeding 10/sec).

(b) Use the "modified CHABA limit" in Figure G-1 to determine the maximum permissible peak SPL. If in doubt as to impulse type, assume B-duration.

(c) If the number of similar impulses (N) experienced per day exceeds 100, reduce the permissible level by 10 dB for every tenfold increase in N (e.g., 10 dB when N = 1000, 20 dB when N = 10,000).

(d) If N is less than 100, a higher peak level may be allowed in accordance with the same rule (e.g., 10 dB more when N = 10), provided that an absolute maximum value of 167 dB for durations less than 25 microseconds, grazing incidence (or 162 dB normal incidence) is not exceeded.

(e) If the average repetition rate of impulses falls in the range 0.1 to 1 per second (i.e., the average interval between impulses is 1 to 10 seconds), reduce the permissible peak level by 5 dB.

(f) If the impulses are known to reach human ears in the vicinity at grazing incidence, the permissible peak level may be raised

by 5 dB. NOTE: This allowance should be used with caution and must not be applied if the surroundings are reverberant. If in doubt, assume normal incidence.

(2) Effects Other Than on Hearing

See Section 3 in main document.

2. Special Noises

a. Infrasound G-26

Frequencies below 16 Hz are referred to as infrasonic frequencies. Sources of infrasonic frequencies include earthquakes, winds, thunder, and jet aircraft. Man-made infrasound occurs at higher intensity levels than those found in nature. Complaints associated with high levels of infrasound resemble mild stress reactions and bizarre auditory sensations, such as pulsating and fluttering. It does not appear, however, that exposure to infrasound, at intensities below 130 dB SPL, present a serious health hazard. For the octave band centered at 16 Hz, the A-weighted equivalent to 130 dB SPL is 76 dB(A).

b. Ultrasound G-26

Ultrasonic frequencies are those above 20,000 Hz. They are produced by a variety of industrial equipment and jet engines. The effects of exposure to high intensity ultrasound (above 105 dB SPL) also the effects observed during stress. However, there are experimental difficulties in assessing the effects of ultrasound since:

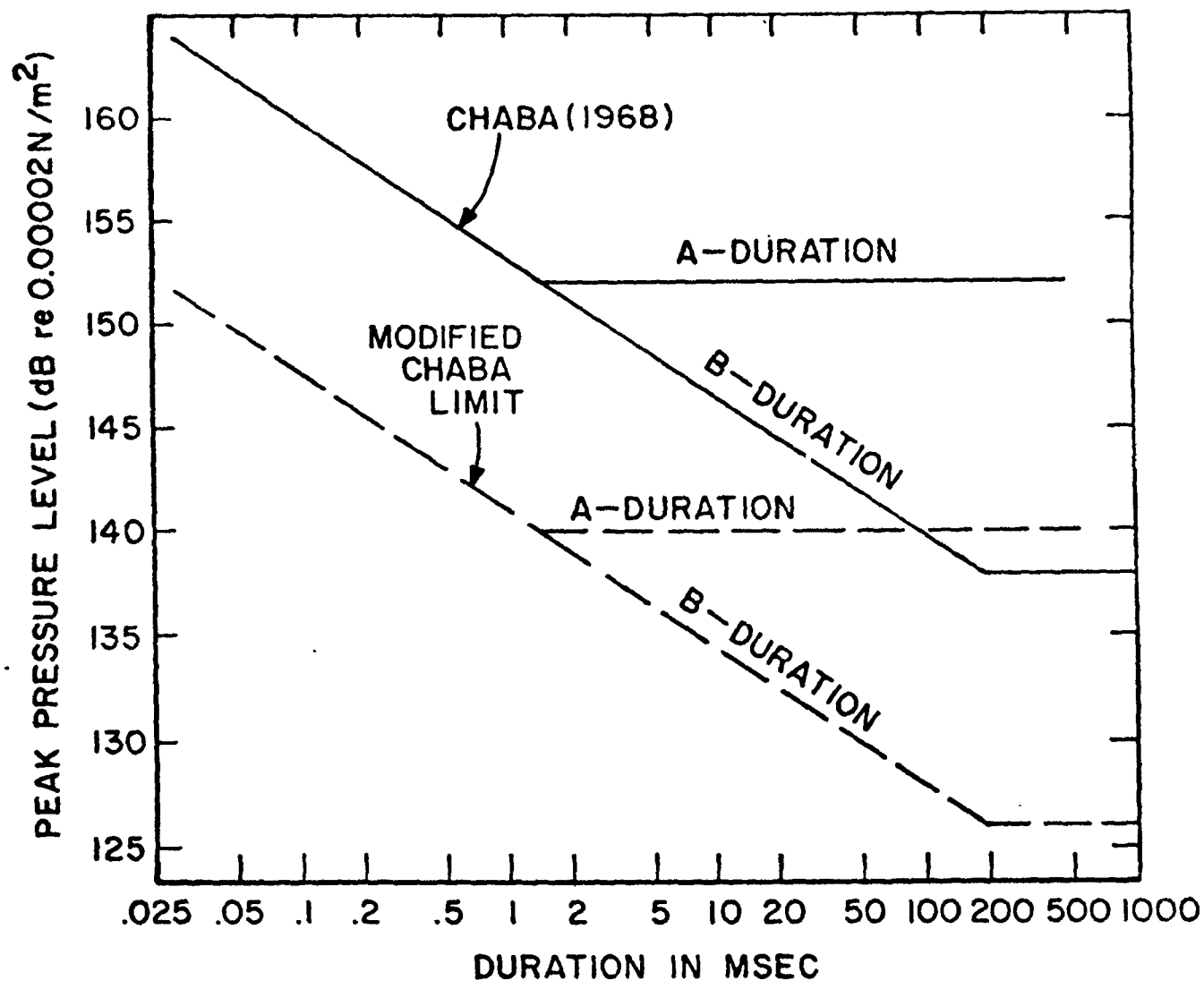


Figure G-1. The 1968 CHABA G-1 Damage-Risk Criterion for Impulse Noise Exposure (solid lines) and a Proposed Modification (hatched lines). Peak Sound Pressure Level is Expressed as a Function of A- or B- Duration in the Range 25 Microseconds to 1 Second. G-1

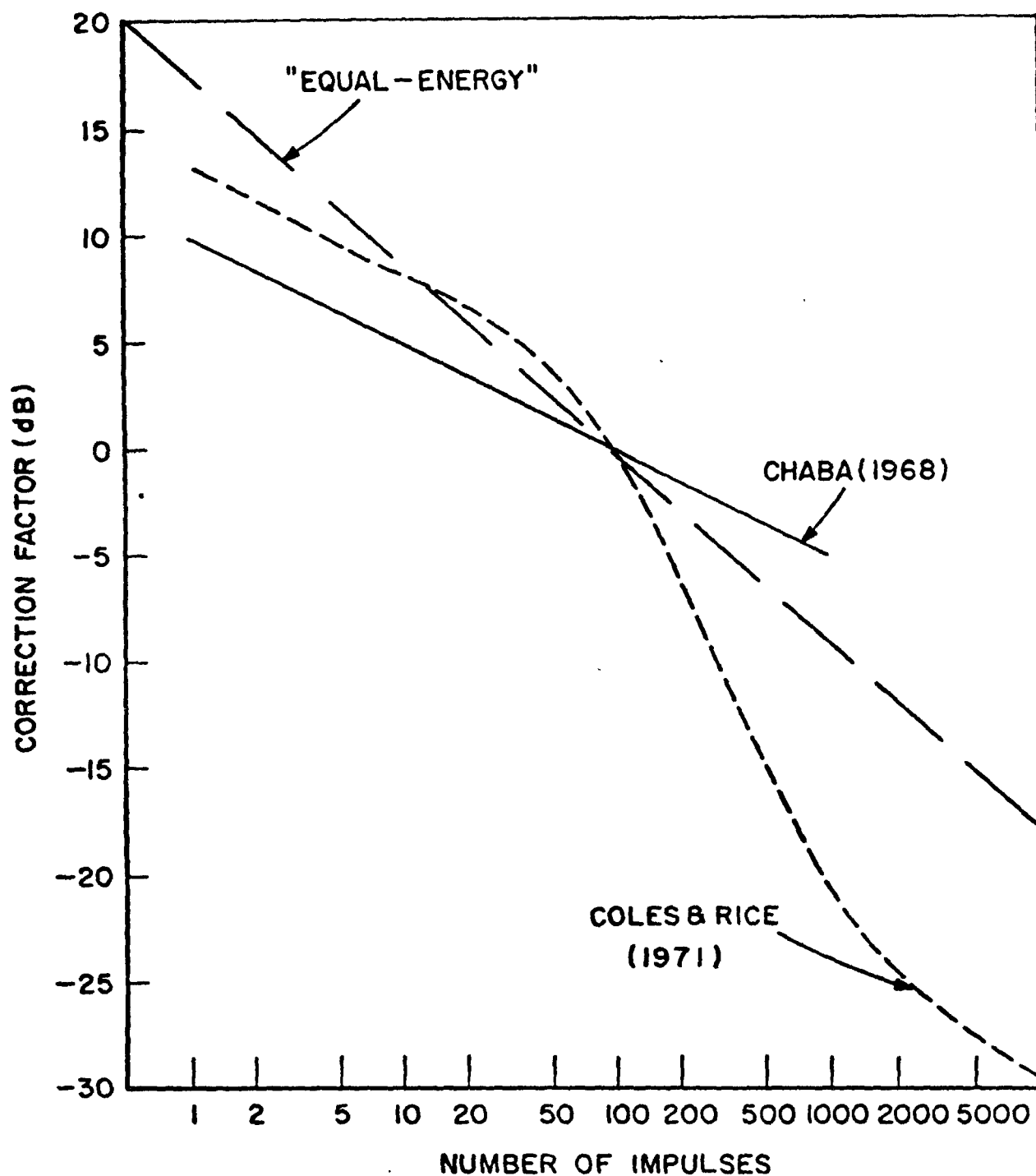


Figure G-2. Comparison of CHABA Weighting (Re: Zero at $N = 100$ Impulses per Day) for Number (N) of Impulses in Daily Exposure $G-1$ with the Proposed Modification by Coles and Rice $G-7$ and an "Equal-Energy" Rule. After McRoberts and Ward. $G-3$

- (1) Ultrasonic waves are highly absorbed by air
- (2) Ultrasonic waves are often accompanied by broad-band noise and by sub-harmonics.

At levels below 105 dB SPL, however, there have been no observed adverse effects.

3. Sonic Booms

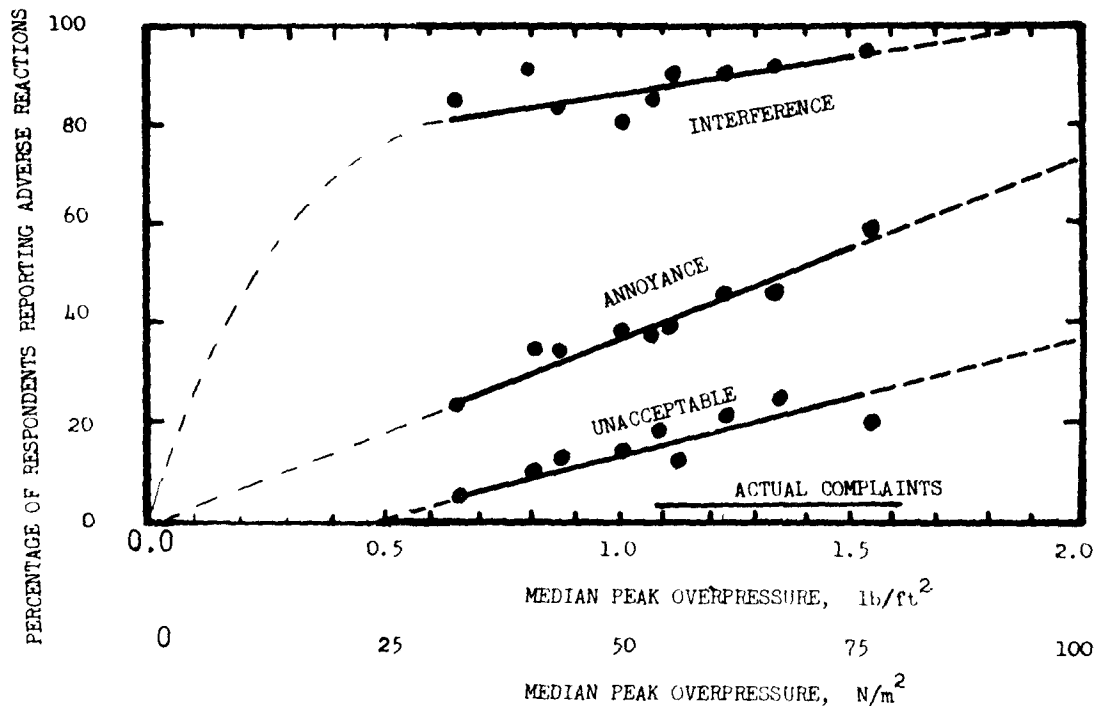
Present day knowledge regarding the acceptability of sonic booms by man is based on observations from both experimental field and laboratory studies and observations of community response to actual sonic boom exposures. Individual human response to sonic boom is very complex and involves not only the physical stimulus, but various characteristics of the environment as well as the experiences, attitudes and opinions of the population exposed.^{G-22} One of the most comprehensive studies to date on sonic boom exposure of a large community over a relatively long period of time was the Oklahoma City study conducted in 1964.^{G-23, G-24} Eight sonic booms per day at a median outdoor peak overpressure level of 1.2 psf N/m^2 were experienced by this community over a 6 month period. Some results of this study are summarized in Figure G-3. For eight sonic booms/day, there is clear evidence that the median peak overpressure must be well below 1 psf if no annoyance is reported. When interviewed, part of the population considered eight sonic booms/day to be unacceptable. By extrapolation, the level at which eight sonic booms per day should be acceptable for the population is slightly less than 0.5 psf. But even

at 0.5 psf N/m^2 , approximately 20% of the population consider themselves annoyed by an exposure of eight sonic booms/day. Linear extrapolation of the annoyance data of Figure G-3 indicates that annoyance will disappear in the total population only when the 8 sonic booms per day are less than 0.1 psf . A linear extrapolation is probably not entirely justified, however, as certainly for sonic booms much less than 0.1 to 0.2 psf , a large percentage of the population is not even expected to sense the boom. The fact that the extrapolation must curve is best illustrated by the interference curve of Figure G-3. Unless the extrapolation is curved as shown, interference would be predicted for about 70% of the population even when the peak overpressure is zero, i.e., no boom at all.

So far the discussion has been about eight sonic boom exposures per day on a daily recurring basis. The more difficult question is how to interpret the effect on public health and welfare of sonic booms that are more infrequent than eight times per day. Kryter G-25 provides a relationship which indicates that a sonic boom of 1.9 psf once a day would be equal to 110 PNdB or a CNR of 98 dB . It further suggests that the level (which is proportional to p^2) should be reduced by one half (3 dB) for each doubling of number of occurrences. From Appendix A, L_{dn} is approximately related to CNR by $L_{\text{dn}} = \text{CNR} - 35 \text{ dB}$. Thus, a CNR of 98 equals an L_{dn} of 63 dB . If the sonic boom is made equivalent to an $L_{\text{dn}} = 55 \text{ dB}$, so as to be consistent with the levels identified in the interference/annoyance section of this document, the level of one daytime sonic boom per day must be less than 0.75 psf . For more than eight sonic booms/day, the

level should be less than 0.26 psf ($0.75/\sqrt{N}$). This result is slightly lower than the data from Figure G-3. However, extrapolating the annoyance line in the figure suggests that the .26 psf level of 8 booms would annoy only 8% of the people and more would find it unacceptable. Therefore, the relationship proposed is: daytime peak over-pressure per day = $(0.75 \text{ psf})/\sqrt{N}$ where N = number of sonic booms/day. Thus, the peak over-pressure of a sonic boom that occurs during the day should be no more than 0.75 psf if the population is not to be annoyed or the general health and welfare adversely affected.

The standard sound level meter, which is a time-averaging device, will not properly measure the peak sound pressure level of sonic booms.



NOTE: Data compiled from Oklahoma City Study. Dashed lines are extrapolations. All data for 8 sonic boom/day. G-22

Figure G-3. Percentage of Respondents Reporting Adverse Reactions to Sonic Booms

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United States
Environmental Protection
Agency

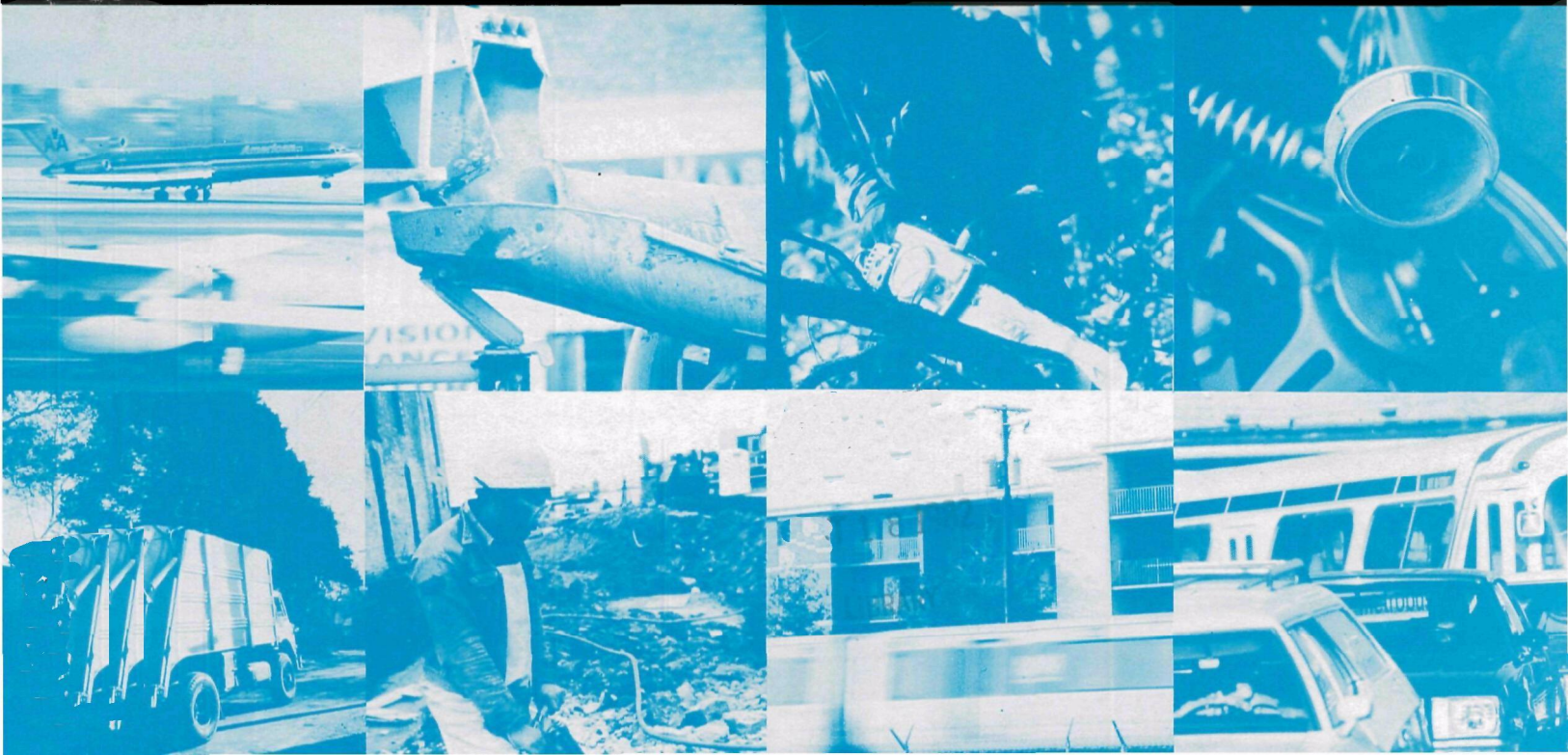
Office of Noise
Abatement and Control
Washington DC 20460



The Environmental Frontier: Noise Control

Opportunities for:

Engineers
Lawyers
Scientists
Urban Planners
Business Administrators
Public Administrators
Public Health Planners



Engineers, lawyers, scientists, urban planners . . .
There is a need for your talents and skills in an
important new area of environmental protection—
noise control.

It's a field of many unanswered questions and
unsolved problems. It's an environmental challenge
wide open to creative planning and new directions.
It's an opportunity to influence policy decisions that
will affect our quality of living today and in years
to come.

Why Noise Control?

Noise is one of the major environmental problems facing our country today. It's not a new problem. In Rome in the first century B.C., Julius Caesar passed a noise ordinance banning chariots from the streets at night. But it wasn't until the start of the Industrial Revolution in this country that serious noise problems began to develop. And, in the last thirty years, noise levels have been accelerating with unprecedented speed. Noise has become an urban menace, a pollutant as pervasive as the effects of impure water or dirty air. The number of high-intensity noise sources has increased dramatically—there are more cars, trucks, motorcycles, and other vehicles on our highways than ever before. There are more industrial plants, more machinery, more of everything that produces excessive noise. The noise problem has become an integral part of modern life.

Perhaps the most serious consequence of noise is its effect on people's health. Noise loud enough to cause hearing loss is virtually everywhere today. It is estimated that at least 20 million Americans are exposed daily to noise that is permanently damaging to their hearing. Noise interferes with conversation, work, rest and recreation, and sleep. Noise can produce serious physical and psychological stress. The body reacts to such stress with increased adrenaline, changes in heart rate, and elevated blood pressure. Growing evidence suggests possible links between noise and heart problems, high blood pressure, and negative effects on fetal development in the womb.

The noise problem in America is very real and it is growing steadily worse. No longer just an urban problem, noise intrudes into our suburbs and even into the countryside. Noise detracts from the quality of our lives and adversely affects the health and well-being of our citizens.



Seeking Solutions

Cities and citizens, around the country, are beginning to find creative solutions to their noise problems. Citizens are lobbying for noise ordinances and enforcement of noise laws. Cities are developing noise control programs and hiring personnel to implement them.

For instance, in Boulder, Col., a concerned citizen formed his own committee, surveyed the community to discover the most annoying noise sources, and then drafted an ordinance. The ordinance included noise level standards for both vehicular and non-vehicular noise, based on evidence gathered by the committee. The ordinance was presented to the city manager and passed by the city council several years ago.

In New York City, the Bureau of Noise Abatement identifies the most annoying and harmful noise sources and then seeks technological and legal solutions. For instance, subway noise, which affects about 4.5 million people every day, is the target of a ten-year program to reduce harmful noise levels. The city regulates all kinds of construction equipment and also has a truck noise enforcement program.



States are also encouraging local communities to start noise control programs. In Florida, the noise control section of the Department of Environmental Regulations has helped more than 100 cities and counties in the last five years develop some type of noise program. The noise control staff consists of only two people, yet it has trained more than 500 local officials in various aspects of environmental noise or motor vehicle noise enforcement.

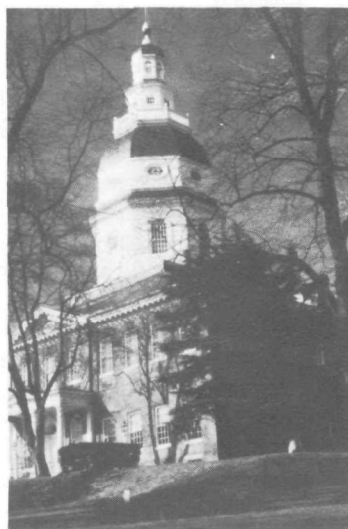
El Segundo, Calif. has tried a unique approach to noise control. The city council purchases quiet equipment whenever possible. This is one example of a community using its purchasing power to induce manufacturers to produce quieter products.

EPA's Role

The U.S. Environmental Protection Agency is also helping cities and states cope with noise problems. The Noise Control Act of 1972 specified that the EPA regulate new products in commerce that are "major sources of noise" and work with state and local governments to create a quieter environment.

Although much of its recent activity has been directed toward regulation of new products, the EPA Noise Office has begun emphasizing state and local programs. In 1978 the Congress passed the Quiet Communities Act which gives EPA added authority to help communities develop noise control programs. In the last several years, the number of local programs has more than doubled. While the primary responsibility for noise control rests with local governments, EPA offers technical assistance to cities and communities. The Quiet Communities Experiment is one project intended to show how to apply the best available techniques to control noise at the local level. The emphasis is on action by the local government aided by technical assistance and support from EPA. Another EPA program, Each Community Helps Others (ECHO),

is designed to assist communities in solving particular noise problems. Community Noise Advisors, who have been selected by EPA, assist certain communities in solving particular noise problems. These communities then share their experiences in noise control with other cities and towns.



State and local efforts to control noise are essential, but Federal regulation is necessary to reduce noise at the source. Based on considerations of best available technology, cost-effectiveness, and estimated health and welfare benefits, regulations have been developed for a variety of products, primarily construction and transportation equipment. EPA has also begun a labeling program to indicate both the noise generating characteristics of selected products and the effectiveness of products sold for the purpose of reducing noise.

But these efforts are only a beginning. Controlling noise has proven a difficult task to accomplish. These pioneering programs alone, though imperative, are not enough to solve the problem. The public remains largely unaware of the serious consequences of noise. And the very nature of the problem—its subtle, invisible, odorless effect—further complicates the efforts to reduce and control excessive noise. Professionals are needed to deal with these complexities and to initiate new and creative solutions.

How Could You Contribute?

If you would like to make a unique contribution in a new and growing field, noise control might be just the thing you've been looking for. A wide range of talents and skills are needed, as well as a commitment to serve, to perceive problems, and to apply specialized knowledge and capabilities to work out solutions. The rewards will be many—the chance to develop as a professional in a new field with unusual challenge and possibilities, and to witness your efforts making a difference in the quality of American life.

What would you do as a professional in the noise control field?

As a lawyer you might be involved in litigation among environmentalists, government agencies, and industries affected by the EPA regulations. For instance, a young attorney in the Noise Enforcement Division of the EPA worked on a case involving 13 air compressor manufacturers and four truck manufacturers that objected to several aspects of proposed noise regulations to quiet these products. The attorney was involved in discussions with senior partners of various law firms and in writing the brief of the U.S. Court of Appeals.

If your background is in science or engineering, you might be involved in predicting and measuring noise levels, conducting and analyzing noise measurement surveys, and reviewing noise potentials of new facilities in your area. For instance, you might determine the best location for a new manufacturing plant and assist in the planning, design, construction, and installation of the plant to achieve desirable noise levels.

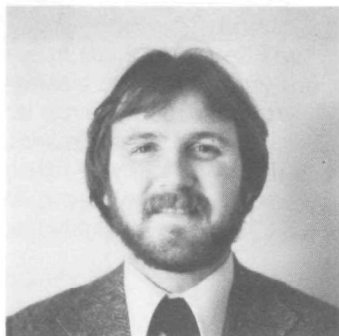


Or, if you are an urban planner, you would assist cities and communities in developing noise control programs and effective enforcement methods. You might develop options for the city to protect residential areas from excessive noise. A mass transit system might be better planned with your insights on effective abatement tactics.

Here are a few examples of young professionals who enjoy the challenge of finding answers and solutions to the problems of noise.

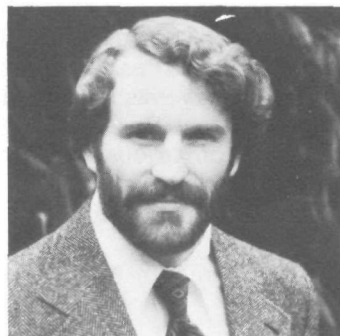
Lon Loken
MPH, University of
Minnesota

Lon Loken is working in noise and air pollution for the City of Bloomington, Minnesota and says he is witnessing a "snowball effect" as more and more cities in Minnesota are developing noise control programs. "I enjoy what I do," he says, which includes noise measurement surveys, "on the street noise enforcement," answering citizen complaints, and reviewing the noise and air pollution potentials of new facilities coming to town. "I enjoy the wide variety of noise problems I encounter and the satisfaction that comes from helping people on a day to day basis," he says. His advice to a professional considering a career in noise control would be to take several courses in acoustics before entering the field. Lon received a B.A. from Hamline University and a Master of Public Health from the University of Minnesota.



Tom Martin
MBA, City College,
Seattle

Tom Martin works for the State and Local Programs Division of EPA's Office of Noise Abatement and Control, which he considers "an opportunity few other organizations could match, if only because noise programs throughout the country are, with a few exceptions, in the groundbreaking stages." The central element in Tom's job is the administration of grants to lay foundations for noise control programs. This requires coordinating efforts in the ten regional offices, and maintaining contacts with state and municipal governments. Tom sees that noise is generally viewed as a problem which can best be solved at the local level, therefore, "in noise control efforts, the relationship between the various levels of government is not one of mandates and imposition. Instead it involves cooperation and a reciprocal information flow."



John Thillmann
MUA, Virginia Tech

As Chief of Environmental and Technical Services for Fairfax County, Virginia, John Thillmann handles a wide range of environmental problems. He recommends environmental policy and impact assessments for Federal, county, and state projects, and looks out for citizen concerns about the environment, including noise. "We focus a lot of attention on noise problems, because the people of Fairfax county consider it one of the most important issues affecting their day to day living," Thillman says. Highway and airport noise are the biggest concerns of residents, and Thillmann represents their interests to congressional, state, and local officials. Thillman has earned several degrees, including a Masters in Business Management from Central Michigan University and a Masters in Urban Affairs, with concentration in Environmental Affairs, from Virginia Tech.



Debbie Yamamoto
BA, Public Administration
Seattle University

Kathy Summerlee
JD, Georgetown
University Law Center

Jesse Borthwick
MA, Engineering and
Acoustics, Penn State

Debbie Yamamoto came into the noise control field, "because I was environmentally conscious and found my opportunity in noise control." Debbie is the EPA Regional Noise Representative for Alaska, Idaho, Oregon, and Washington. She's responsible for handling all kinds of noise problems, ranging from determining how much noise a certain vehicle or machine makes to helping a community get a noise control program started. A recent project for Debbie has been helping Spokane conduct an attitude survey, finding out what people think about noise. "Noise control is still a very small field. It hasn't gotten much recognition yet and there are opportunities for specialists and generalists," she says. Debbie believes there is a particular need for experts in the more complex area of industrial noise control. Debbie earned a B.A. in Public Administration from Seattle University in 1973.

"I'm involved in a much broader range of areas than I would have ever expected after just completing law school," says Kathy Summerlee, an Attorney-Advisor in the Noise Enforcement Division of the EPA. "Noise control is a very new and growing field and there is a lot of opportunity for creative thinking on directions both the Federal and local governments should take in implementing and enforcing noise control.

"Noise is where the future is," according to Kathy. She finds the work "challenging" and believes "my talents are being called upon often because there aren't that many people who work in noise control." Kathy earned her JD from Georgetown University Law Center where she was on the Law Review, and her A.B. from Duke University where she majored in economics and English.

"The benefits from your efforts are more readily apparent in noise control than they are in any other area of environmental protection," says Jesse Borthwick, Executive Director of the National Association of Noise Control Officials. The non-profit association works to foster inter-program communication and cooperation between state and local noise control programs. Jesse became interested in noise control while working as an Environmental Specialist in the Florida Department of Transportation. "It's been a challenge ever since I started working on noise," he says.

Jesse has a varied background. He received an A.A. in General Science, a B.S. in Marine Biology, a Masters in Environmental Pollution Control and a Masters in Engineering and Acoustics.



How To Apply

If you are interested in learning of specific noise control job opportunities in Federal, state, or local government send a resume with salary requirements or a government 171 form to:

Careers

**Office of Noise Abatement
and Control (ANR-471)
U.S. Environmental
Protection Agency
Washington, D.C. 20460**

The EPA Noise Office will function as an informal job clearinghouse, identifying opportunities in local and state offices as well as in EPA Regional and Headquarters offices. When a position becomes available, EPA will notify interested and qualified applicants and explain how to apply formally for the job.

If you would like to learn more about noise control and the career opportunities available, feel free to write us. We'd be glad to talk with you about what we do, and how your skills and capabilities could be challenged in a meaningful environmental career.

Ordinance 2025-05

AN ORDINANCE OF THE CITY OF ST. PETE BEACH, FLORIDA CREATING ADDITIONAL NEW NUISANCE NOISE CONTROL PROVISIONS IN CODE CHAPTER 46 ENVIRONMENT, CREATING NEW ARTICLE VI NOISE PLAINLY AUDIBLE AT A DISTANCE IN A RESIDENTIAL LOCATION, CREATING SECTION 46-160 AUTHORITY AND SCOPE, CREATING SECTION 46-161 FINDINGS OF FACT, CREATING SECTION 46-162 EXCESSIVE NOISE DECLARED A VIOLATION AND THE MEANS AND METHOD OF DETERMINING EXCESSIVE NOISE AND DEFINITION OF RESIDENTIAL LOCATION, CREATING SECTION 46-163 DECLARATION OF PUBLIC NUISANCE AND DECLARATION OF IRREPARABLE AND IRREVERSIBLE NATURE OF NOISE VIOLATIONS, CREATING SECTION 46-164 ENFORCEMENT, CREATING SECTION 46-165 CONSTRUCTION OF ARTICLE, CREATING SECTION 46-166 EXCESSIVE NOISE DETERMINATION UNDER PLAINLY AUDIBLE AT A DISTANCE IN A RESIDENTIAL LOCATION, MEANS AND METHOD, CREATING SECTION 46-167 EXEMPTIONS, CREATING SECTION 46-168 SEVERABILITY; PROVIDING FOR CODIFICATION; CONFLICTS; SEVERABILITY; CORRECTION OF SCRIVENER'S ERROR; CONSTRUCTION; PUBLICATION; AND AN EFFECTIVE DATE.

WHEREAS, it is the public policy of the city that every person is entitled to noise levels that are not detrimental to the life, health, comfort and peace of the city's residents and visitors, and to be free of excessive noise that interferes with the enjoyment of property in the city by its residents and its visitors

WHEREAS, residents of the city have the right to have peace and quiet in and about their residences, and be free from excessive noise, particularly during times and days when many residents typically relax and sleep.

WHEREAS, it is recognized that excessive noise potentially lowers the value of nearby residences.

WHEREAS, the City Commission finds these amendments to assist in the preservation and maintenance the public health, safety, and welfare.

WHEREAS, a business impact estimate pursuant to Florida Statute 166.041(4) has been prepared.

NOW, THEREFORE, THE CITY COMMISSION OF THE CITY OF ST. PETE BEACH FLORIDA, HEREBY ORDAINS:

SECTION 1. Recitals. The above recitals (“Whereas” clauses) are hereby adopted as legislative findings, purpose and intent of the City Commission.

SECTION 2. The Code of the City of St Pete Beach is amended as shown in EXHIBIT A to this Ordinance.

SECTION 3. Codification. This Ordinance shall be codified in the Code of the City of St. Pete Beach.

SECTION 4. Conflicts. All ordinances or parts of ordinances, in conflict herewith are hereby repealed to the extent of any conflict with the Ordinance.

SECTION 5. Severability. In the event that any word(s), phrase(s), portion(s), sub-subsection(s), subsection(s), or section(s) of this article, is contrary to law, or against public policy, or shall for any reason whatsoever held to be invalid, illegal or unconstitutional, by any court of competent jurisdiction, such word(s), phrase(s), portion(s), sub-subsection(s), subsection(s), or section(s) of this article shall be null and void, and shall be deemed severed, and a separate, distinct, and independent provision from the remaining provisions of this article, and such holding shall in no manner affect the validity of the remaining words, phrases, portions, sub-subsections, subsections, or sections of this article, which shall remain in full force and effect. This article shall be construed in a manner to accomplish, to the greatest extent legally possible, the purposes of this article as expressed herein. Further, specifically, and without limitation, in the event any portion of this article, expressed or implied, causes this article or any portion thereof, to be determined to be a content-based regulation rather than a content-neutral regulation, then such portion of this article causing such determination shall be deemed severed, and it is declared the legislative intent of the city commission that the balance of this article would have been enacted absent such portion

SECTION 6. Scrivener’s Error. The City Attorney may correct scrivener’s errors found in this Ordinance by filing a corrected copy of this Ordinance with the City Clerk.

SECTION 7. Construction. This Ordinance is to be liberally construed to accomplish its objectives.

SECTION 8. Publication. This Ordinance shall be published in accordance with the requirements of law.

SECTION 9. Effective Date. This ordinance shall take effect immediately upon adoption.

FIRST READING: _____
PUBLISHED: _____
SECOND READING: _____
PUBLIC HEARING: _____

CITY COMMISSION, CITY OF ST. PETE
BEACH, FLORIDA.

Adrian Petrila, Mayor

I, Amber LaRowe, City Clerk of the City of St. Pete Beach, Florida, do hereby certify that the foregoing Ordinance was duly adopted in accordance with the provisions of applicable law this _____ day of _____, 2025.

Amber LaRowe, City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

City Attorney

Words ~~stricken~~ through shall be deleted. Words underscored constitute the amendment proposed. The symbol *** constitutes code sections not shown for purposes of brevity. Remaining provisions are now in effect and remain unchanged.

EXHIBIT A

ARTICLE VI – NOISE PLAINLY AUDIBLE AT A DISTANCE IN A RESIDENTIAL LOCATION

Sec. 46-160 Authority and purpose/Intent.

This article is enacted under the home rule power of the City of St. Pete Beach in the interest of the health, peace, safety and general welfare. The purpose of this article is to regulate and reduce the noises within the city in order to preserve, protect and promote the public health, peace, comfort, safety and welfare, and the peace and quiet and quality of life of the inhabitants, both residents and visitors alike, of the city, prevent injury to human and animal life, preserve property values, foster the peace and comfort of the city's inhabitants, and facilitate the enjoyment of the natural attractions of the city. It is not the intent of this Article to negate or alter the provisions of other sections of this code of ordinances, including, but not limited to, Article IV, Noise, of Chapter 46, Environment, and Sec. 98-1, Hours for construction work restricted.

Sec. 46-161. Findings of facts.

Based on information and communications from city residents to city staff and city commissioners, the practical first-hand experience and observations of city commissioners, common sense deductions of city commissioners based on long term experiences in St. Pete Beach, information learned by city commissioners from various residents, and from research concerning the adverse health consequences of excessive noise, the city commission finds, recognizes, determines and declares:

- (1) It is the public policy of the city that every person is entitled to noise levels that are not detrimental to the life, health, comfort and peace of the city's residents and visitors, and to be free of excessive noise that interferes with the enjoyment of property in the city by its residents and its visitors.
- (2) Scholarly research has shown that exposure to excessive noise can have serious and long term negative physical and psychological health consequences which can include, but are not limited to, hearing impairment, hypertension, heart disease, sleep disturbance, changes in the immune system and increased incidence of diabetes. Research has also shown that adverse cardiovascular effects occur from chronic exposure to noise due to the sympathetic nervous system's inability to habituate. The sympathetic nervous system maintains lighter stages of sleep when the body is exposed to noise, which does not allow blood pressure to follow the normal rise and fall cycle of an undisturbed circadian rhythm.
- (3) Stress from time spent around elevated noise levels has been linked with increased accident rates and aggression and other anti-social behaviors.
- (4) It is recognized that excessive noise potentially lowers the value of nearby residences.

Words ~~stricken~~ through shall be deleted. Words underscored constitute the amendment proposed. The symbol *** constitutes code sections not shown for purposes of brevity. Remaining provisions are now in effect and remain unchanged.

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- (5) Residents of the city have the right to have peace and quiet in and about their residences as well as in public areas, and be free from excessive noise, particularly during times and days when many residents typically relax and sleep.
 - (6) The city recognizes the importance of the provisions of the Florida Constitution, Art. 2, Sec. 7, relating to the abatement of excessive and unnecessary noise.
 - (7) It is hereby declared that the making, creation or maintenance of excessive noise within the city is a menace to the public health, comfort, safety, welfare, peace and the quality of life and prosperity of the people of the city. The provisions and prohibitions hereinafter contained and enacted are the minimum deemed to be necessary to protect the health, safety and welfare of the city and its residents and visitors.
 - (8) It is recognized that due to the intermittent character of some violations of this article, traditional methods of code enforcement with running fines, or citations which could merely be considered a cost of doing business by some commercial establishments, may not be effective means of deterrence of violations of this article. Therefore, it is found that in some cases, it is reasonable and appropriate, at the determination of the city commission, to provide for enforcement of this article through a request for equitable relief in the circuit court.

Sec. 46-162. Excessive noise declared a violation, the means and method of determining excessive noise and definition of residential location.

It is a violation of this code of ordinances for any person within the city to make, continue, cause, or allow to be made or continued, any excessive noise as more specifically described herein. This article sets forth a plainly audible at a distance in a residential location method by which noise can be determined to be "excessive noise" and therefore a violation of this code of ordinances. Residential location shall mean any location within the city limits of St. Pete Beach that has a zoning designation of RU-1, RU-2, or RLM-1, or which is the location of a single family residence, residential duplex/triplex/fourplex, multifamily development, residential condominium or cooperative apartment, or residential apartment.

Sec. 46-163. Declaration of public nuisance, and Declaration of irreparable and irreversible nature of noise violations.

It is hereby found and determined that excessive noise in the City of St. Pete Beach is a public nuisance, subject to injunction and abatement by a court of competent jurisdiction. It is also hereby found and determined that excessive noise in the City of St. Pete Beach is irreparable and irreversible in nature so as to justify enhanced fines and penalties.

Sec. 46-164. Enforcement.

Violations of this article may be investigated by any law enforcement officer and/or any St. Pete Beach code officer duly appointed by the city manager, (herein "investigating officer") and may be enforced through any, some, or all of the following:

- (a) A suit brought by the city in the circuit court to restrain, enjoin, or prevent a violation of this article.
- (b) Citation enforcement with the fines for such violations as set by the city commission.
- (c) Special magistrate proceedings.
- (d) Any other legal proceedings deemed appropriate by the city commission.

Sec. 46-165. Construction of article.

This article shall be liberally construed to accomplish its purpose of regulating excessive noise, protecting the character of St. Pete Beach, the health, safety, and general welfare of its residents and visitors, and the preservation of the quality of life in St. Pete Beach, and the quiet enjoyment by St. Pete Beach's residents of their residential property.

Sec. 46-166. Excessive noise determination under plainly audible at a distance in a residential location means, and method.

- (a) **Investigation.** Either in response to a complaint, or upon an investigating officer becoming otherwise aware of an alleged violation of this chapter, such investigating officer may proceed to investigate the alleged violation by the plainly audible at a distance in a residential location means or method of determining excessive noise as described hereinafter.
- (b) **Noise from an Originating Property (not on a dock over water body).** If the excessive noise originates in a location on land (and is not originating from a dock over a water body), the investigating officer shall determine the source of the noise being investigated (which location can be in any zoning category) and shall reasonably determine the relevant property lines of the real property that is the source of the noise being investigated (the "Originating Property"). The investigating officer may then, through physical measurement or other reliable source, determine a location which is both two hundred (200) feet or more from the property line of the Originating Property that is closest to the residential property (the "Receiving Property"). The investigating officer shall then, at that Receiving Property, use the officer's normal hearing faculties, not enhanced by any mechanical or medical device, such as a hearing aid, to determine whether the noise being investigated is plainly audible. As used herein, "property line" shall mean an imaginary line along the surface of land, and its vertical plane extension, which separates the real property owned, rented, controlled or leased by a person or entity from real property owned, rented, controlled or leased by another person, entity, or government. Where an Originating Property extends into a water body, the applicable property line abutting a water line of the Originating Property shall be the imaginary line, and its vertical plane extension, separating where the dry land touches the body of water, so that submerged lands, whether below dockage or not, and regardless of ownership of the submerged lands

or dockage, shall not be considered part of the Originating Property for purposes of making the two hundred (200) foot measurement.

- (c) **Noise from an Originating Location on a Dock over a water body.** If the excessive noise originates from a location that is on a dock over a water body, the investigating officer shall determine the source of the noise being investigated (which location can be in any zoning category, or no zoning category) and shall reasonably determine the distance of the dock (the "Originating Location") from the Receiving Property. The investigating officer may then, through physical measurement or other reliable source, determine a location which is both two hundred (200) feet or more from the Originating Location and is a residential property (the "Receiving Property"). The investigating officer shall then, at that Receiving Property, use the officer's normal hearing faculties, not enhanced by any mechanical or medical device, such as a hearing aid, to determine whether the noise being investigated is plainly audible.
- (d) **Means of Detection.** Investigating officers shall make a determination as to whether a noise is plainly audible, by using the following standards:
 - (1) The primary means of detection shall be by means of the officer's ordinary auditory senses, so long as the officer's hearing is not enhanced by any mechanical device, such as a microphone or hearing aid.
 - (2) The officer must have a direct line of hearing, to the area from which the noise is coming so that the officer can readily identify the source of the offending noise.
 - (3) The officer need not determine the particular words or phrases being produced or the name of any song or artist producing the noise. For example, the detection of a rhythmic bass reverberating type noise is sufficient to constitute a plainly audible noise.
- (e) **Prohibition.** No person shall permit, cause, allow, or create noise that is plainly audible in a residential location when that residential location is located no less than two hundred (200) feet from the Originating Location or the closest property line of the Originating Property.

Sec. 46-167. Exemptions.

The following shall be exempt from the definition of excessive noise contained in this article:

- (1) Yard and building maintenance machinery, equipment and tools operated between 7:00 a.m. and 8:00 p.m. when operated with all manufacturer's standard mufflers and noise-reducing equipment in use and in proper operating condition;
- (2) Construction operations between 7:00 a.m. and 8:00 p.m. Monday through Saturday, for which building permits have been issued, or for construction operations not requiring permits due to the scope of work or ownership of the project; provided all equipment used in the construction operations is operated in accordance with the manufacturer's specifications and with all standard equipment, manufacturer's mufflers and noise-reducing equipment in use and in proper operating condition;
- (3) Electrical or mechanical equipment in proper operating condition, installed and designed for the type of property or use upon which it is placed, providing air conditioning, heat, ventilation, plumbing or electrical service to the property on which it is placed;

- (4) Emergency generators used only during a loss of electrical power for any cause other than non-payment of utility services or failure to obtain or connect to available electrical service;
- (5) Aircraft operated in conformity with, or pursuant to, federal law, federal air regulations and air traffic control instructions;
- (6) Operations of interstate motor and rail carriers, to the extent that local regulation of noise levels of such vehicles has been preempted by the Noise Control Act of 1972 (42 U.S.C. § 4901 et seq.) or other applicable federal laws or regulations;
- (7) Operation of motor vehicles to the extent regulated by Section 316.293 Florida Statutes;
- (8) Sanitation operations including the unloading, emptying or collection of any waste or recycling container;
- (9) Noises created by vehicles or equipment owned or operated by governmental entities including the City of St. Pete Beach, Pinellas County, Pinellas County Public Schools, the State of Florida, the Federal Government, or their designees, when such vehicles or equipment are engaged in emergency operations, including operations during or following storms, accidents, or other catastrophes;
- (10) Noises created by vehicles or equipment owned or operated by governmental entities including the City of St. Pete Beach, Pinellas County, Pinellas County Public Schools, the State of Florida, the Federal Government, or their designees, when such vehicles or equipment are engaged in construction operations; and
- (11) Noises during times and/or at locations as specifically designated by resolution of the city commission upon request to the city commission and upon good cause shown.

Sec. 46-168. Severability.

In the event that any word(s), phrase(s), portion(s), sub-subsection(s), subsection(s), or section(s) of this article, is contrary to law, or against public policy, or shall for any reason whatsoever held to be invalid, illegal or unconstitutional, by any court of competent jurisdiction, such word(s), phrase(s), portion(s), sub-subsection(s), subsection(s), or section(s) of this article shall be null and void, and shall be deemed severed, and a separate, distinct, and independent provision from the remaining provisions of this article, and such holding shall in no manner affect the validity of the remaining words, phrases, portions, sub-subsections, subsections, or sections of this article, which shall remain in full force and effect. This article shall be construed in a manner to accomplish, to the greatest extent legally possible, the purposes of this article as expressed herein. Further, specifically, and without limitation, in the event any portion of this article, expressed or implied, causes this article or any portion thereof, to be determined to be a content-based regulation rather than a content-neutral regulation, then such portion of this article causing such determination shall be deemed severed, and it is declared the legislative intent of the city commission that the balance of this article would have been enacted absent such portion.

City of St. Pete Beach

Noise Ord 2025-05

First Reading



CURRENT CODE : 2 alternative standards

The City currently has 2 standards for noise enforcement:

i) Decibel based measurement

- Potential Defenses: must measure background noise difficult if not impossible to do

i) Loud and raucous standard – “any sound that, because of its volume level, duration and character, annoys, disturbs, injures or endangers the comfort, health, peace or safety of reasonable persons of ordinary sensibilities.”

- Potential Defenses: subjective and difficult to enforce.



Proposed Noise Ordinance – **Plainly Audible**

- Proposed ordinance prohibits excessive noise that is
 - “**Plainly audible at a distance**” as a 3rd alternative enforceable noise standard.

Objective non-content based standard upheld as constitutional standard by Florida Supreme Court.

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Proposed – 3rd Noise Standard

Plainly Audible

This Ordinance sets forth a **plainly audible at a distance in a residential location method by which noise can be determined to be "excessive noise"** and therefore a violation of this code of ordinances.

Plainly Audible Standard -

No person shall permit, cause, allow, or create excessive noise that is **plainly audible** in a residential location when that residential location is located no less than two hundred (200) feet from the Originating Location or the closest property line of the Originating Property.

Proposed – 3rd Noise Standard

Plainly Audible

Residential location shall mean any location within the city limits of St. Pete Beach that has a zoning designation of **RU-1, RU-2, or RLM-1**,
or

which is the location of a **single family residence, residential duplex/triplex/fourplex, multifamily development, residential condominium or cooperative apartment, or residential apartment.**

Investigating Officer Determination

(a) Investigating officers shall make a determination as to whether a noise is plainly audible, by using the following standards:

(1) **officer's ordinary auditory senses**, so long as the officer's hearing is not enhanced by any mechanical device, such as a microphone or hearing aid.

(2) The officer must have a **direct line of hearing**, to readily identify the source of the offending noise.

(3) The officer **need not determine the particular words or phrases being produced** or the name of any song or artist producing the noise. For example, the detection of a **rhythmic bass reverberating type noise** is sufficient to constitute a plainly audible noise.



Excessive Noise Plainly Audible is a Public Nuisance

[new] Sec. 46-163.

Declaration of public nuisance and Declaration of irreparable and irreversible nature of noise violations.

It is hereby found and determined that **excessive noise in the City of St. Pete Beach is a public nuisance**, subject to injunction and abatement by a court of competent jurisdiction. It is also hereby found and determined that excessive noise in the City of St. Pete Beach is **irreparable and irreversible in nature** so as to justify enhanced fines and penalties as set forth by resolution of the city commission.



Plainly Audible Prohibition – as Proposed

Would be simple and generally applicable as currently written in proposed ordinance:

- **applicable City-wide**
- **all day and night**

Variations/Options

1) Limited Times

Plainly Audible prohibited at certain times only
(e.g., 8 pm to 8 am)

2) Different Distances by Location

Different distances for different locations

(Corey Ave... Beachfront Areas ... Bay/Canalfront...Zoning Districts)



Business Impact Estimate Form

This Business Impact Estimate Form is provided to document compliance with and exemption from the requirements of Sec. 166.041(4), Fla. Stat. If one or more boxes are checked below under “Applicable Exemptions”, this indicates that the City of St. Pete Beach has determined that Sec. 166.041(4), Fla. Stat., does not apply to the proposed ordinance and that a business impact estimate is not required by law. If no exemption is identified, a business impact estimate required by Sec. 166.041(4), Fla. Stat. will be provided in the “Business Impact Estimate” section below. In addition, even if one or more exemptions are identified, the City of St. Pete Beach may nevertheless choose to provide information concerning the proposed ordinance in the “Business Impact Estimate” section below. This Business Impact Estimate Form may be revised following its initial posting.

Proposed ordinance’s title/reference:

AN ORDINANCE OF THE CITY OF ST. PETE BEACH, FLORIDA CREATING ADDITIONAL NEW NUISANCE NOISE CONTROL PROVISIONS IN CODE CHAPTER 46 ENVIRONMENT, CREATING NEW ARTICLE VI NOISE PLAINLY AUDIBLE AT A DISTANCE IN A RESIDENTIAL LOCATION, CREATING SECTION 4166- 0 AUTHORITY AND SCOPE, CREATING SECTION 4166-1 FINDINGS OF FACT, CREATING SECTION 4166-2 EXCESSIVE NOISE DECLARED A VIOLATION AND THE MEANS AND METHOD OF DETERMINING EXCESSIVE NOISE AND DEFINITION OF RESIDENTIAL LOCATION, CREATING SECTION 4166-3 DECLARATION OF PUBLIC NUISANCE AND DECLARATION OF IRREPARABLE AND IRREVERSIBLE NATURE OF NOISE VIOLATIONS, CREATING SECTION 46-164 ENFORCEMENT, CREATING SECTION 4166-5 CONSTRUCTION OF ARTICLE, CREATING SECTION 4166- 6 EXCESSIVE NOISE DETERMINATION UNDER PLAINLY AUDIBLE AT A DISTANCE IN A RESIDENTIAL LOCATION, MEANS AND METHOD, CREATING SECTION 46- 167 EXEMPTIONS, CREATING SECTION 4166-8 SEVERABILITY; PROVIDING FOR CODIFICATION; CONFLICTS; SEVERABILITY; CORRECTION OF SSCRIVENER' ERROR; CONSTRUCTION; PUBLICATION; AND AN EFFECTIVE DATE.

Applicable Exemptions:

- ☐ The proposed ordinance is required for compliance with Federal or State law or regulation;
- ☐ The proposed ordinance relates to the issuance or refinancing of debt;
- ☐ The proposed ordinance relates to the adoption of budgets or budget amendments, including revenue sources necessary to fund the budget;
- ☐ The proposed ordinance is required to implement a contract or an agreement, including, but not limited to, any Federal, State, local, or private grant, or other financial assistance accepted by the municipal government;
- ☐ The proposed ordinance is an emergency ordinance;

- ☐ The ordinance relates to procurement; or
- ☐ The proposed ordinance is enacted to implement the following:
 - ☐ Part II of Chapter 163, Florida Statutes, relating to growth policy, county and municipal planning, and land development regulation, including zoning, development orders, development agreements, and development permits;
 - ☐ Sections 190.005 and 190.046, Florida Statutes, regarding community development districts;
 - ☐ Section 553.73, Florida Statutes, relating to the Florida Building Code; or
 - ☐ Section 633.202, Florida Statutes, relating to the Florida Fire Prevention Code.

Business Impact Estimate:

The City of St. Pete Beach hereby publishes the following information:

- 1. A summary of the proposed ordinance (must include a statement of the public purpose, such as serving the public health, safety, morals and welfare):**

This proposed ordinance serves to protect the public health, safety, morals, and welfare of the residents of, and visitors to, the City of St. Pete Beach, by adding an additional ordinance setting standards for noise violations in the City. The purpose is to protect the peace and quiet and quality of life of the inhabitants, both residents and visitors alike of the City, prevent injury to human and animal life, preserve property values, foster the peace and comfort of the City's inhabitants, and facilitate the enjoyment of the natural attractions of the City. The ordinance makes it a violation for any person to make, continue, cause or allow to be made or continued, any excessive noise that is plainly audible at a specified distance in a residential location. The ordinance also sets the standards for the measurement of the noise and sets standards based on distances and times of day for the measurement of noise.

- 2. An estimate of the direct economic impact of the proposed ordinance on private, for-profit businesses in the municipality, including the following, if any:**

- (a) An estimate of direct compliance costs that businesses may reasonably incur if the ordinance is enacted:**

The direct compliance costs for each business subject to this Ordinance will be based on a variety of factors, including the volume of noise being created that travels to a residential area, and any mitigation measures that a business may take to stay in compliance with the ordinance. The compliance might be as simple as lowering the volume of noise emanating from a business during certain times, but could also include expenses related to having an acoustical expert design

measures that contain noise created in and around a business so as not to result in a violation of the ordinance and any expenses that might be incurred to carry out the recommendations of the acoustical expert.

(b) Identification of any new charge or fee on businesses subject to the proposed ordinance, or for which businesses will be financially responsible:

Other than expenses involved in potential fines for noise violations, it is not anticipated that there will be any new charges or fees on businesses subject to this proposed ordinance.

(c) An estimate of the municipality's regulatory costs, including an estimate of revenues from any new charges or fees that will be imposed on businesses to cover such costs:

It is not anticipated that this ordinance will increase the City's regulatory costs unless there is an uptick in noise violations if businesses do not comply with the new ordinance provisions, and no new charges or fees (other than Noise violation fines) would be imposed on businesses.

3. A good faith estimate of the number of businesses likely to be impacted by the ordinance:

There are 39 outdoor and open roof bars in St. Pete Beach and each of these might be impacted.

4. Additional information the governing body determines may be useful (if any):

Not applicable.

Note: The City's provision of information in the Business Impact Estimate section above, notwithstanding an applicable exemption, shall not constitute a waiver of the exemption or an admission that a business impact estimate is required by law for the proposed ordinance. The City's failure to check one or more exemptions below shall not constitute a waiver of the omitted exemption or an admission that the omitted exemption does not apply to the proposed ordinance under Sec. 166.041(4), Fla. Stat., Sec. 166.0411, Fla. Stat., or any other relevant provision of law.

CITY OF ST. PETE BEACH

NOTICE OF PUBLIC HEARING

The City of St. Pete Beach City Commission will consider the adoption of the following Ordinances on March 10, 2025, at 6:00 P.M. or soon thereafter in the St. Pete Beach City Commission Chambers, 155 Corey Ave, St. Pete Beach, FL 33706:

Ordinance 2025-02

AN ORDINANCE OF THE CITY OF ST. PETE BEACH, FLORIDA FOR THE PURPOSE OF ADOPTING A BEACH ORDINANCE; AMENDING THE LAND DEVELOPMENT CODE, DIVISION 25 – COASTAL PROTECTION AND CONSERVATION, SECTION 25.9 – PERMIT REQUIRED; RENUMBERING SECTION 25.10 – PERMITTING PROCEDURES; RENUMBERING SECTION 25.11 – VARIANCES; AMENDING DIVISION 44 – MARINE TURTLE PROTECTION, SECTION 44.3 – PROHIBITION OF ACTIVITIES DISRUPTIVE TO MARINE TURTLES; RENUMBERING SECTION 44.4 THROUGH SECTION 44.9; AMENDING THE CODE OF ORDINANCES, CHAPTER 6 – ALCOHOLIC BEVERAGES, ARTICLE I – IN GENERAL; SECTION 6-5 – CONSUMPTION OR POSSESSION OF ALCOHOLIC BEVERAGES; CHAPTER 14 – ANIMALS, ARTICLE I – IN GENERAL, SECTION 14-2 – FEEDING WILD BIRDS IN PUBLIC AREAS; ARTICLE II – DOGS, SECTION 14-35 – PROHIBITED ON SAND BEACHES; RENUMBERING SECTION 14-36 – REGULATIONS FOR DOGS IN APPROVED OUTDOOR SEATING AREAS; AMENDING CHAPTER 58 – PARKS AND RECREATION, ARTICLE I – RECREATION; SECTION 58-1 – DEFINITIONS; ARTICLE II – CITY PARKS AND FACILITIES; SECTION 58-23 – VENDING IN CITY PARKS; RENUMBERING SECTION 58-24 – CAMPING; RENUMBERING SECTION 58-25 – DOMESTIC ANIMALS; AMENDING SECTION 58-26 – PROHIBITED ACTIVITIES IN CITY PARKS; RENUMBERING SECTIONS 58-27 THROUGH 58-31; ADOPTING SECTION 58-31 – SLEEPING DURING NIGHTTIME PROHIBITED; AMENDING CHAPTER 62 – PEDDLERS AND SOLICITATORS, ARTICLE II – COMMERCIAL SOLICITATIONS; DIVISION 2 – PERMIT; SECTION 62-59 – APPLICATION; QUALIFICATIONS; CONTENTS; RENUMBERING SECTIONS 62-60 THROUGH 62-65; AMENDING DIVISION 3 – REGULATIONS; SECTION 62-93 – SPECIFIC RESTRICTIONS ON SOLICITATION ON SAND BEACH AREAS; RENUMBERING SECTION 62-94 – PERMITTED HOURS FOR SOLICITATION; RENUMBERING 62-95 – 62- 120 – RESERVED; AMENDING CHAPTER 94 – WATERWAYS, ARTICLE III – BEACHES, DIVISION 1 – GENERALLY; SECTION 94- 66 – DEFINITIONS; SECTION 94-67 – PENALTIES; SECTION 94-68 – CHAIRS, TABLES, UMBRELLAS; SECTION 94-69 – PICNICS AND FOOD CONSUMPTION; SECTION 94-70 – SLEEPING DURING NIGHTTIME PROHIBITED; SECTION 94-71 – TIKI HUTS; SECTION 94-72 – TEMPORARY STRUCTURES; SECTION 94-73 – VEHICLE PERMITS; SECTIONS 94-74 - 94-79 – RESERVED; DIVISION 2 – BEACH MAINTENANCE REGULATIONS; SECTION 94-101 – REQUIREMENTS; SECTION 94-102 – PROHIBITIONS; SECTION 94- 103 – EXEMPTIONS; SECTIONS 94-104 – 94-130 – RESERVED; CREATING NEW CHAPTER 95 – BEACHES; SECTION 95-1 INTENT AND PURPOSE; SECTION 95-2 – DEFINITIONS; SECTION 95-3 – PENALTIES; SECTION 95-4 – CHAIRS, TABLES, UMBRELLAS; SECTION 95-5 – PICNICS AND FOOD CONSUMPTION; SECTION 95- 6 – TIKI HUTS; SECTION 95-7 TEMPORARY STRUCTURES; SECTION 95-8 – VEHICLE PERMITS; SECTION 95-9 – BEACH MAINTENANCE REGULATIONS; SECTION 95-10 – PROHIBITIONS ON SAND BEACH; SECTION 95-11 – ANIMALS PROHIBITED ON SAND BEACHES; SECTION 95-12 – DISTRIBUTION OF HANDBILLS AND OTHER ADVERTISING; SECTION 95-13 – FISHING ON THE BEACH; SECTION 95-14 – FEEDING WILD BIRDS AND SEABIRDS; SECTION 95-15 – FIREWORKS; SECTION 95-16 – MICRO-MOBILITY; SECTION 95-17 – VENDING ON PUBLIC BEACHES; SECTION 95-18 – SOLICITATION; SECTION 95-19 – PROHIBITION OF ACTIVITIES DISRUPTIVE TO MARINE TURTLES; SECTION 95-20 – PERMIT REQUIRED; SECTION 95-21 – SPECIAL EVENTS ON THE BEACH; SECTION 95-22 – TRANSIENT LODGING FACILITIES; PROVIDING FOR CODIFICATION; CONFLICTS; SEVERABILITY; CORRECTION OF SCRIVENER'S ERROR; CONSTRUCTION; PUBLICATION; AND AN EFFECTIVE DATE.

Ordinance 2025-04

AN ORDINANCE OF THE CITY OF ST. PETE BEACH, FLORIDA FOR THE PURPOSE OF ADOPTING NEW CODE SECTIONS 22-285 THROUGH 22-289 PROVIDING FOR ALTERNATIVE CODE ENFORCEMENT THROUGH A CODE ENFORCEMENT CITATION PROCEDURE; PROVIDING FOR CODIFICATION; CONFLICTS; SEVERABILITY; CORRECTION OF SCRIVENER'S ERROR; CONSTRUCTION; PUBLICATION; AND AN EFFECTIVE DATE.

Ordinance 2025-05

AN ORDINANCE OF THE CITY OF ST. PETE BEACH, FLORIDA CREATING ADDITIONAL NEW NUISANCE NOISE CONTROL PROVISIONS IN CODE CHAPTER 46 ENVIRONMENT, CREATING NEW ARTICLE VI NOISE PLAINLY AUDIBLE AT A DISTANCE IN A RESIDENTIAL LOCATION, CREATING SECTION 46-160 AUTHORITY AND SCOPE, CREATING SECTION 46-161 FINDINGS OF FACT, CREATING SECTION 46-162 EXCESSIVE NOISE DECLARED A VIOLATION AND THE MEANS AND METHOD OF DETERMINING EXCESSIVE NOISE AND DEFINITION OF RESIDENTIAL LOCATION, CREATING SECTION 46-163 DECLARATION OF PUBLIC NUISANCE AND DECLARATION OF IRREPARABLE AND IRREVERSIBLE NATURE OF NOISE VIOLATIONS, CREATING SECTION 46-164 ENFORCEMENT, CREATING SECTION 46-165 CONSTRUCTION OF ARTICLE, CREATING SECTION 46-166 EXCESSIVE NOISE DETERMINATION UNDER PLAINLY AUDIBLE AT A DISTANCE IN A RESIDENTIAL LOCATION, MEANS AND METHOD, CREATING SECTION 46- 167 EXEMPTIONS, CREATING SECTION 46-168 SEVERABILITY; PROVIDING FOR CODIFICATION; CONFLICTS; SEVERABILITY; CORRECTION OF SCRIVENER'S ERROR; CONSTRUCTION; PUBLICATION; AND AN EFFECTIVE DATE.

NOTE: The above-scheduled public hearings may be continued from time-to-time pending adjournment. Any written comments received on the subject matter will become part of the official record. Any person who decides to appeal against any decision of the City Commission concerning any matter considered at these hearings will need a record of the proceedings and, for such purposes, may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is based. Americans with Disabilities Act: Florida Statutes Chapter 286.26, Accessibility of public hearings to the physically handicapped. Per the Americans with Disabilities Act and Florida Statutes, persons needing special accommodations to participate in a hearing should contact City Hall at (727) 367-2735 no later than forty-eight (48) hours before the hearing for assistance. Copies of Ordinances 2025-02, 2025-04, and 2025-05 are on file in the Planning Department and may be inspected by the public. Any interested parties may appear at the meeting and be heard about the proposed ordinance. FOR MORE INFORMATION OR TO VIEW THE FILES ON THESE REQUESTS, PLEASE CONTACT: City of St. Pete Beach, Planning Department, 155 Corey Avenue, St. Pete Beach, Florida 33706 - (727) 363-9229.

Science : Health Effects of Noise

- **Health effects:** High noise levels can harm people's health, including causing psychological and physiological effects.
- **Sleep disturbance:** Noise can interfere with sleep, which can cause annoyance and speech interference.
- **Physical Effects of Noise**

Noise can affect people in different ways. It has been found that sleep interference occurs at an average night time sound level of 35db. It has also been determined that younger people are found to be less sensitive to sleep interruption by about 10db. (Suter, 1991) When measuring sound, and the effect of sound passing through barriers or walls, sound reduces by approximately 15db. Meaning that if sound were to be measured at 50db outside of a home, the db reading on the inside of the home would be approximately 35db. Thus allowing uninterrupted sleep. Unregulated noise has been proven to have serious adverse effects on people far beyond simple annoyance. Exposure to loud noise has resulted in uncontrollable stress which can result in mood swings as well as hormonal and nervous system changes in otherwise healthy subjects. (E.P.A. 1974) The stress, tension, and fatigue associated with long term exposure to noise has destroyed marriages, caused others to loose their jobs, and forced other to sell their homes at considerable losses. (Zwerling, 1996)

Zwerling, E.M.. (1996, December 63). Turning Down the Volume: Effective Strategies for Community Noise Enforcement. The Police Chief, 53-59.

Zwerling, E.M.. (2000, April) Local Government in the 21st Century: Exploring the Legal Issues. Presented to the International Municipal Lawyers Association, Washington D.C.

Zwerling, E.M. (1999, June) Community Noise Enforcement. Unpublished.
Rutgers University

E.P.A., Environmental Protection Agency . (1974) . Information on levels
of

Environmental Noise Requisite to Protect Public Health and Welfare with
an

Adequate Margin of Safety. (Publication No. EPA 550/9-74-004) U.S. EPA
Washington D.C.

United States Environmental Protection Agency. Information on levels of
environmental noise requisite to protect public health and welfare with an
adequate margin of safety. No. 2115. US Government Printing Office. EPA
Publication No: 550976003 [https://nepis.epa.gov/Exe/ZyPDF.cgi/
2000L3LN.PDF?Dockey=2000L3LN.PDF](https://nepis.epa.gov/Exe/ZyPDF.cgi/2000L3LN.PDF?Dockey=2000L3LN.PDF). Published March 1974.
Accessed April 26, 2021. [[Google Scholar](#)]

Cowan, J. P., (1994). Handbook of Environmental Acoustics. New York: Van Nostrand Reinhold.

Suter, Alice H. (1991, November 21) Dormant Noise Control Act and Options to Abate Noise Pollution. Administrative Conference of the United States.

Exposure to loud sounds puts millions of people in the United States and across the globe at risk not only of hearing loss, but several highly prevalent health effects including ischemic heart disease, hypertension, injuries, anxiety, sleep disruption, stress, and cognitive impairments.^{4,5,6}

- World Health Organization. World report on hearing. <https://apps.who.int/iris/bitstream/handle/10665/339913/9789240020481-eng.pdf?sequence=1>. Published March 2021. Accessed April 26, 2021.
- Hammer MS, Swinburn TK, Neitzel RL. Environmental noise pollution in the United States: developing an effective public health response. *Environmental health perspectives*. 2014;122(2):115–9. 10.1289/ehp.1307272. [[DOI](#)] [[PMC free article](#)] [[PubMed](#)] [[Google Scholar](#)]

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Effects of Noise on Health and Welfare

One obligation of a community is to protect its citizens from adverse environmental influences. Noise is one of these factors, Noise has documented effects on people, they can be divided into three types.

The **first type** is a physical effect that directly and adversely effects a person's health. Hearing loss and vibration of bodily components are examples. The **second type** is a physiological effect that adversely effects a person's health; heightened blood pressure and general stress response are examples. The **third type** is psychological that adversely effects a person's welfare; examples are distraction, annoyance, and complaint.

The following is a short list of recognized effects of noise that can be addressed as a reason for a noise ordinance: **Excess non-Occupational noise exposure, hearing loss on both public and private property, speech interference on both public and private property, audio interference on both public and private property, and sleep interference on mostly private property.** [\[22\]](#)

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